

SERVICE MANUAL

C4500 / C4501 / C4505

notebook



Notebook Computer
C4500/C4501/C4505
Service Manual

Preface

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Version 1.0
January 2010

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About this Manual

This manual is intended for service personnel who have completed sufficient training to undertake the maintenance and inspection of personal computers.

It is organized to allow you to look up basic information for servicing and/or upgrading components of the *C4500/C4501/C4505* series notebook PC.

The following information is included:

Chapter 1, Introduction, provides general information about the location of system elements and their specifications.
Chapter 2, Disassembly, provides step-by-step instructions for disassembling parts and subsystems and how to upgrade elements of the system.

Appendix A, Part Lists

Appendix B, Schematic Diagrams

IMPORTANT SAFETY INSTRUCTIONS

Follow basic safety precautions, including those listed below, to reduce the risk of fire, electric shock and injury to persons when using any electrical equipment:

1. Do not use this product near water, for example near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool.
2. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electrical shock from lightning.
3. Do not use the telephone to report a gas leak in the vicinity of the leak.
4. Use only the power cord and batteries indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.
5. This product is intended to be supplied by a Listed Power Unit (Full Range AC/DC Adapter - AC Input 100 - 240V, 50 - 60Hz/ DC Output 19V, 3.42A or 18.5V, 3.5A (**65W**) minimum).

CAUTION

Always disconnect all telephone lines from the wall outlet before servicing or disassembling this equipment.

**TO REDUCE THE RISK OF FIRE, USE ONLY NO. 26 AWG OR LARGER,
TELECOMMUNICATION LINE CORD**

This Computer's Optical Device is a Laser Class I Product

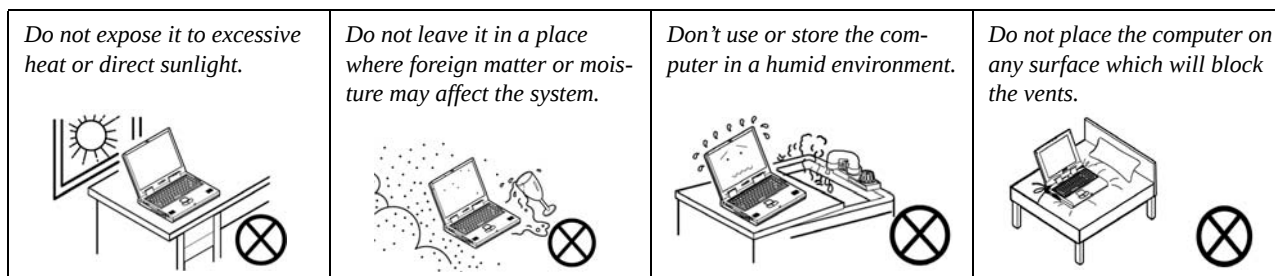
Instructions for Care and Operation

The notebook computer is quite rugged, but it can be damaged. To prevent this, follow these suggestions:

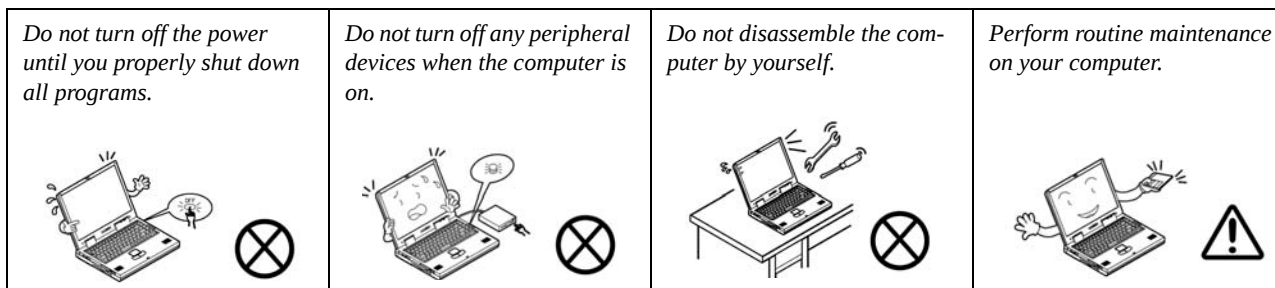
1. **Don't drop it, or expose it to shock.** If the computer falls, the case and the components could be damaged.



2. **Keep it dry, and don't overheat it.** Keep the computer and power supply away from any kind of heating element. This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.

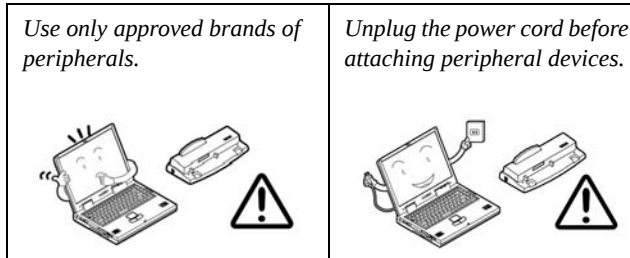


3. **Follow the proper working procedures for the computer.** Shut the computer down properly and don't forget to save your work. Remember to periodically save your data as data may be lost if the battery is depleted.



Preface

4. **Avoid interference.** Keep the computer away from high capacity transformers, electric motors, and other strong magnetic fields. These can hinder proper performance and damage your data.
5. **Take care when using peripheral devices.**



Power Safety

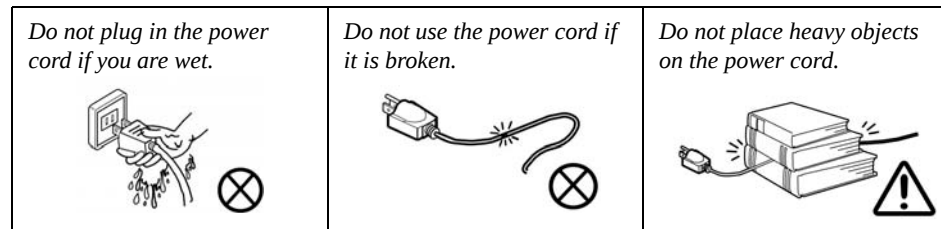
The computer has specific power requirements:

- Only use a power adapter approved for use with this computer.
- Your AC adapter may be designed for international travel but it still requires a steady, uninterrupted power supply. If you are unsure of your local power specifications, consult your service representative or local power company.
- The power adapter may have either a 2-prong or a 3-prong grounded plug. The third prong is an important safety feature; do not defeat its purpose. If you do not have access to a compatible outlet, have a qualified electrician install one.
- When you want to unplug the power cord, be sure to disconnect it by the plug head, not by its wire.
- Make sure the socket and any extension cord(s) you use can support the total current load of all the connected devices.
- Before cleaning the computer, make sure it is disconnected from any external power supplies (i.e. AC/DC adapter or car adapter).



Power Safety Warning

Before you undertake any upgrade procedures, make sure that you have turned off the power, and disconnected all peripherals and cables (including telephone lines). It is advisable to also remove your battery in order to prevent accidentally turning the machine on.



Battery Precautions

- Only use batteries designed for this computer. The wrong battery type may explode, leak or damage the computer.
- Do not continue to use a battery that has been dropped, or that appears damaged (e.g. bent or twisted) in any way. Even if the computer continues to work with a damaged battery in place, it may cause circuit damage, which may possibly result in fire.
- Recharge the batteries using the notebook's system. Incorrect recharging may make the battery explode.
- Do not try to repair a battery pack. Refer any battery pack repair or replacement to your service representative or qualified service personnel.
- Keep children away from, and promptly dispose of a damaged battery. Always dispose of batteries carefully. Batteries may explode or leak if exposed to fire, or improperly handled or discarded.
- Keep the battery away from metal appliances.
- Affix tape to the battery contacts before disposing of the battery.
- Do not touch the battery contacts with your hands or metal objects.

Battery Guidelines

The following can also apply to any backup batteries you may have.

- If you do not use the battery for an extended period, then remove the battery from the computer for storage.
- Before removing the battery for storage charge it to 60% - 70%.
- Check stored batteries at least every 3 months and charge them to 60% - 70%.



Battery Disposal

The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

Caution

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used battery according to the manufacturer's instructions.

Battery Level

Click the battery icon  in the taskbar to see the current battery level and charge status. A battery that drops below a level of 10% will not allow the computer to boot up. Make sure that any battery that drops below 10% is recharged within one week.

Preface

Related Documents

You may also need to consult the following manual for additional information:

User's Manual on CD

This describes the notebook PC's features and the procedures for operating the computer and its ROM-based setup program. It also describes the installation and operation of the utility programs provided with the notebook PC.

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1: Introduction

Overview

This manual covers the information you need to service or upgrade the **C4500/C4501/C4505** series notebook computer. Information about operating the computer (e.g. getting started, and the *Setup* utility) is in the *User's Manual*. Information about drivers (e.g. VGA & audio) is also found in *User's Manual*. That manual is shipped with the computer.

Operating systems (e.g. *Windows XP*, etc.) have their own manuals as do application software (e.g. word processing and database programs). If you have questions about those programs, you should consult those manuals.

The **C4500/C4501/C4505** series notebook is designed to be upgradeable. See [Disassembly on page 2 - 1](#) for a detailed description of the upgrade procedures for each specific component. Please note the warning and safety information indicated by the “” symbol.

The balance of this chapter reviews the computer's technical specifications and features.

System Specifications

Processor
AMD® Athlon™ x2 Dual Core Processor: QL62 (2.0GHz) 65nm (65 Nanometer) Process Technology, 1MB L2 Cache & 667MHz FSB - TDP 35W - (638-pin) Micro--PGA Package - Socket-S1G2
AMD® Athlon™ Single Core Processor: QI46 (2.1GHz) 65nm (65 Nanometer) Process Technology, 512KB L2 Cache & 667MHz FSB - TDP 25W - (638-pin) Micro--PGA Package - Socket-S1G2
Core Logic
ATI® RS780MN + SB700
Display
14.0" 16:9 HD (1366 * 768) TFT LCD
Memory
64-bit Wide DDRII (DDR2) Data Channel Two 200 Pin SO-DIMM sockets supporting DDR2 667/800 MHz Memory Expandable up to 4GB (using 1GB/ 2GB SO-DIMM Modules)
Video
ATI® Radeon HD3200 On Board Video: High Preference 3D/2D Graphic Accelerator Shared Memory Architecture of up to 512MB Supports Microsoft DirectX10 Compatible
BIOS
One 8Mb SPI Flash ROM Phoenix™ BIOS

Storage
One Changeable 12.7mm(h) Super Multi Optical Device Drive (CD/DVD) with SATA Interface One Changeable 2.5" 9.5 mm (h) HDD with SATA (Serial) Interface
Audio
High Definition Audio Direct Sound 3D™ Compatible Built-In Microphone 2 * Built-In Speakers
Keyboard & Pointing Device
Isolated WinKey Keyboard Built-in TouchPad with Multi-Gesture Functionality
Interface
Three USB 2.0 Ports One External Monitor Port One HDMI Out Port One Headphone-Out Jack One Microphone-In Jack One RJ-45 LAN Jack One DC-In Jack
Card Reader
Embedded 7-in-1 Card Reader (MS/ MS Pro/ SD/ Mini SD/ MMC/ RS MMC/ MS Duo) Note: MS Duo/ Mini SD/ RS MMC Cards require a PC adapter

Slots
One ExpressCard 34 Slot Supporting USB & PCIe Interfaces <u>Two Mini-Card Slots with PCIe (Slot 1) & USB (Slot 2) interface:</u> Slot 1 for Half Mini-Card WLAN Module (Option) Slot 2 for 3.75G Module (Factory Option)
Communication
Built-In 10M/100Mb Base-T Ethernet LAN 3rd Party WLAN 802.11b/g/n Half Mini-Card Module with PCIe Interface (Option) Bluetooth 2.1 + EDR (Enhanced Data Rate) Module (Factory Option) 1.3M Pixel PC Camera Module with USB interface (Factory Option) <u>3.75G Module:</u> UMTS/HSPDA-based 3.75G Module with USB Mini-Card Interface (Factory Option) Quad-band GSM/GPRS (850 MHz, 900 MHz, 1800 MHz, 1900 MHz) UMTS WCDMA FDD (2100 MHz) Note that UMTS modes CAN NOT be used in North America
Power Management
Supports Wake on LAN Supports Wake on USB

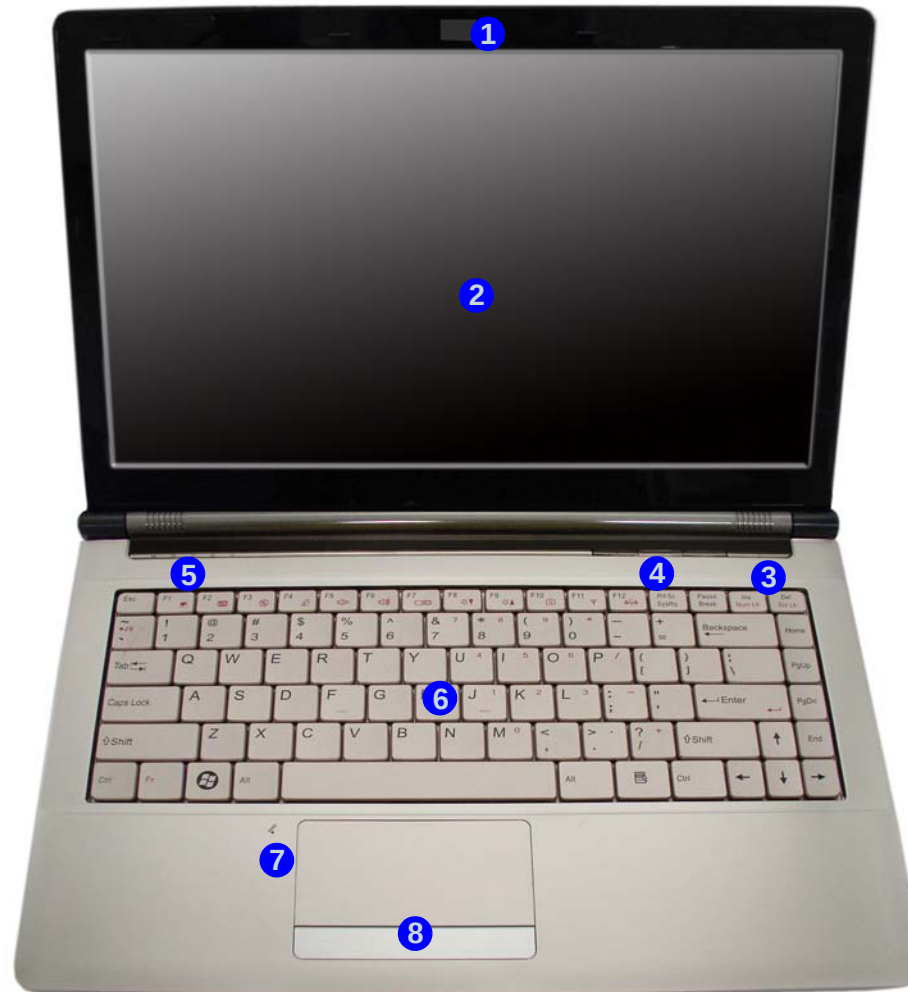
Power
Full Range AC/DC Adapter AC input 100 - 240V, 50 - 60Hz, DC Output 19V, 3.42A or 18.5V, 3.5A (65 Watts) Removable 6 Cell Smart Lithium Ion Battery Pack 48.84WH
Security
Security (Kensington® Type) Lock Slot BIOS Password
Operating System
Windows® Vista (with Service Pack 2) Windows® 7
Environmental Spec
Temperature Operating: 5°C - 35°C Non-Operating: -20°C - 60°C Relative Humidity Operating: 20% - 80% Non-Operating: 10% - 90%
Dimensions & Weight
340mm (w) * 238mm (d) * 13.9 - 31.8mm (h) 2.2 kg with 6 Cell Battery & ODD

Introduction

Figure 1
Top View

1. Optional Built-In PC Camera
2. LCD
3. Power Button
4. Hot Key Buttons
5. LED Status Indicators
6. Keyboard
7. Built-In Microphone
8. TouchPad and Buttons

External Locator - Top View with LCD Panel Open



External Locator - Front and Rear View

Figure 2
Front View

1. LED Power Indicators



Figure 3
Rear View

1. Battery



Introduction

Figure 4
Left Side View

1. DC-In Jack
2. External Monitor Port
3. RJ-45 LAN Jack
4. HDMI-Out Port
5. 2 * USB 2.0 Ports
6. Vent/Fan Intake/Outlet
7. Express Card Slot
8. 7-in-1 Card Reader



Figure 5
Right Side View

1. Microphone-In Jack
2. Headphone-Out Jack
3. USB 2.0 Ports
4. Optional Device Drive Bay
5. Security Lock Slot



External Locator - Bottom View

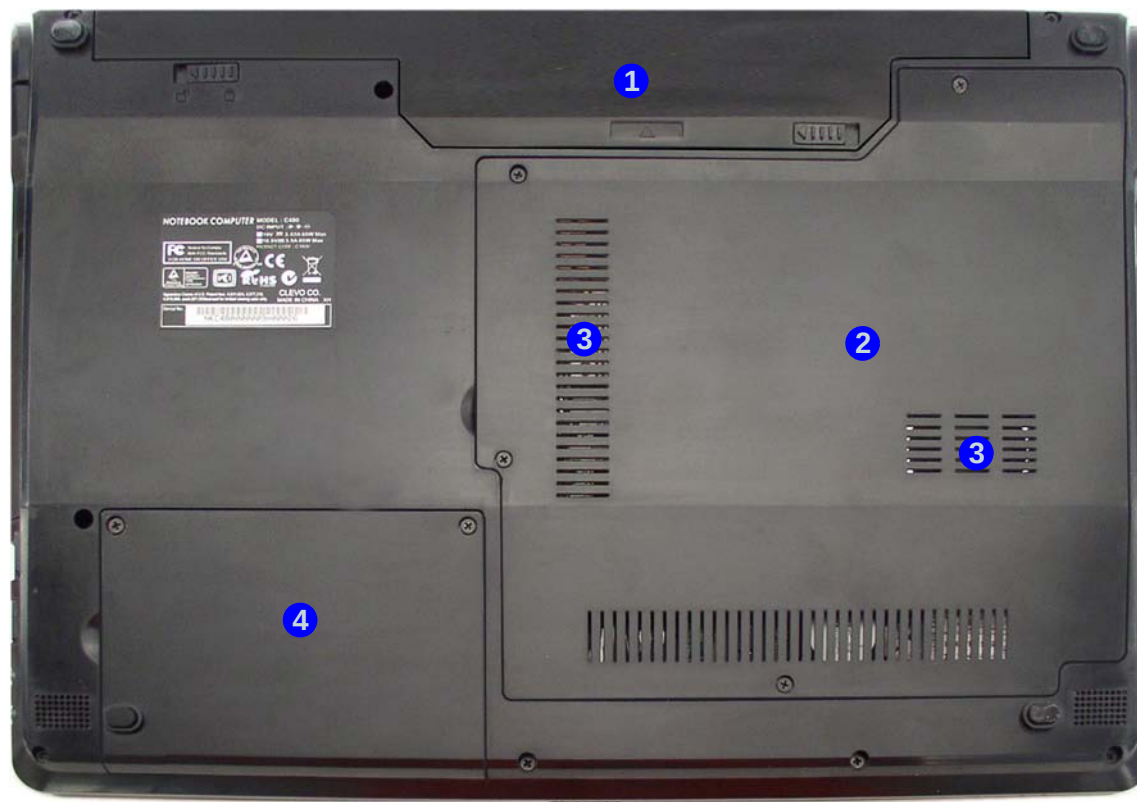


Figure 6
Bottom View

1. Battery
2. Component Bay Cover
3. Vent/Fan Intake/Outlet
4. Hard Disk Bay Cover



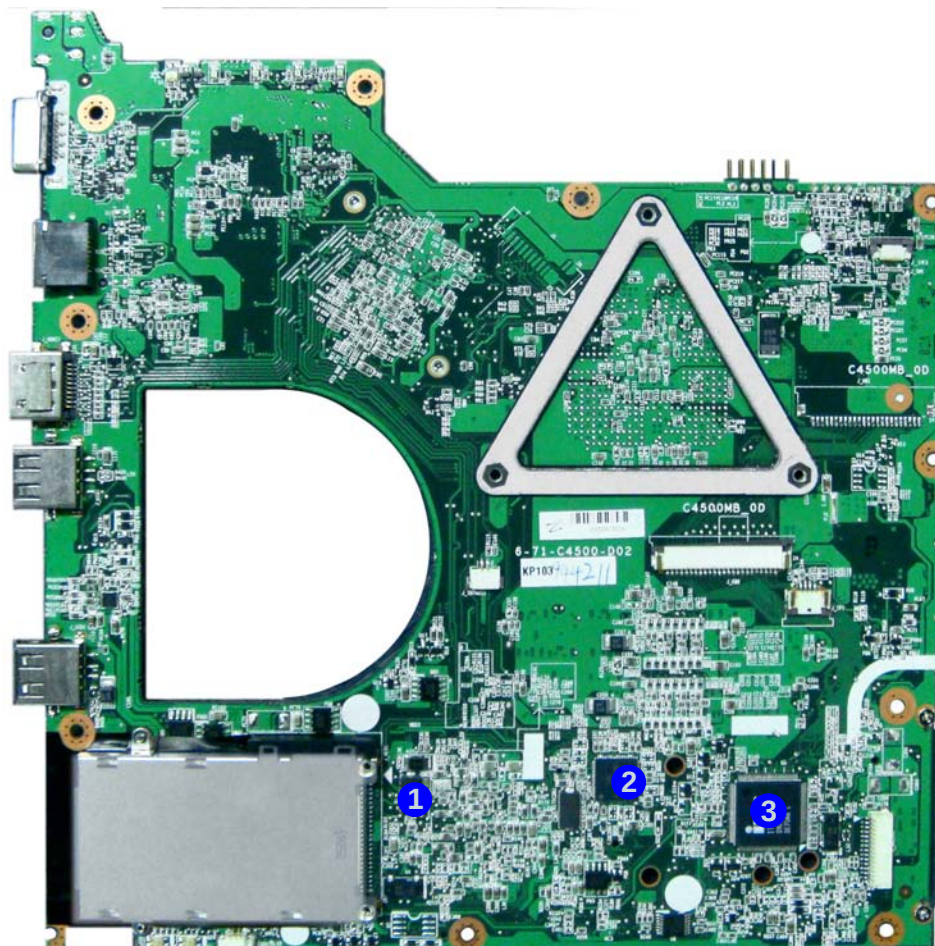
Overheating

To prevent your computer from overheating make sure nothing blocks the vent/fan intakes while the computer is in use.

Figure 7
Mainboard Top
Key Parts

1. JMB385
2. ICS9LPRS480
3. ITE IT8502E

Mainboard Overview - Top (Key Parts)



Mainboard Overview - Bottom (Key Parts)

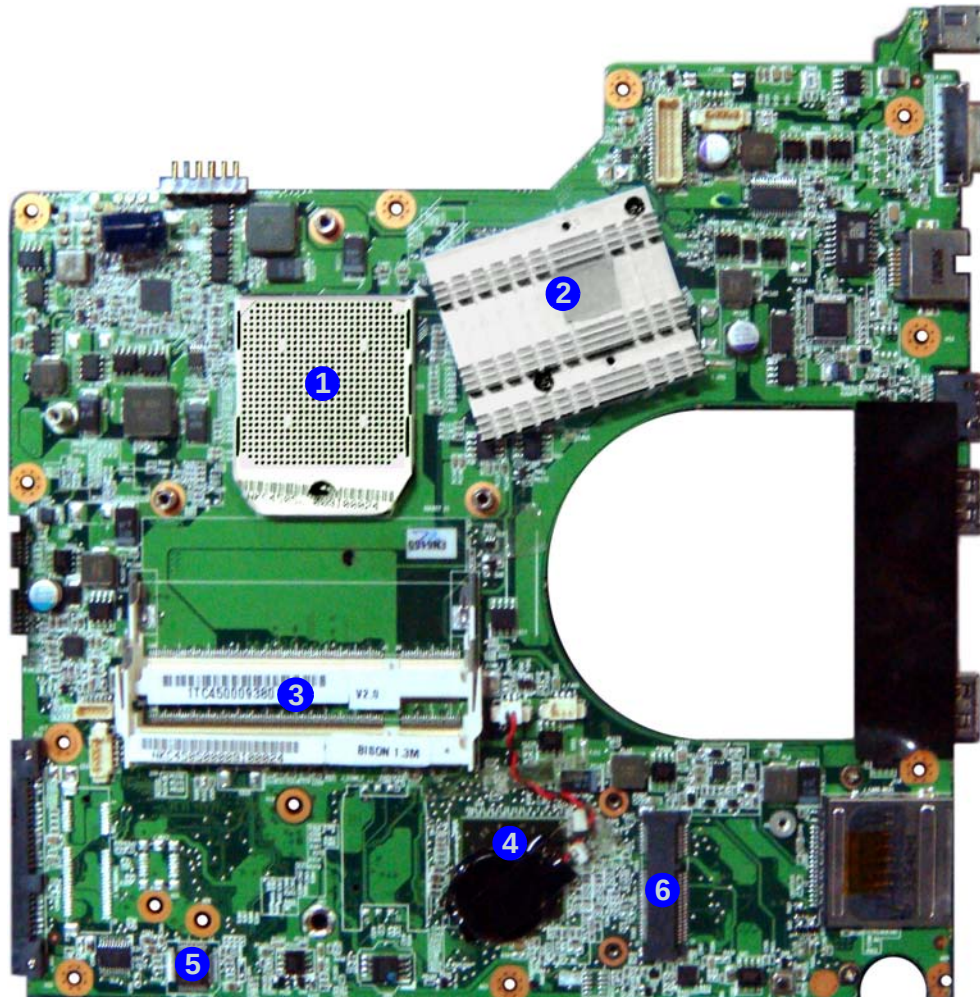


Figure 8
**Mainboard Bottom
Key Parts**

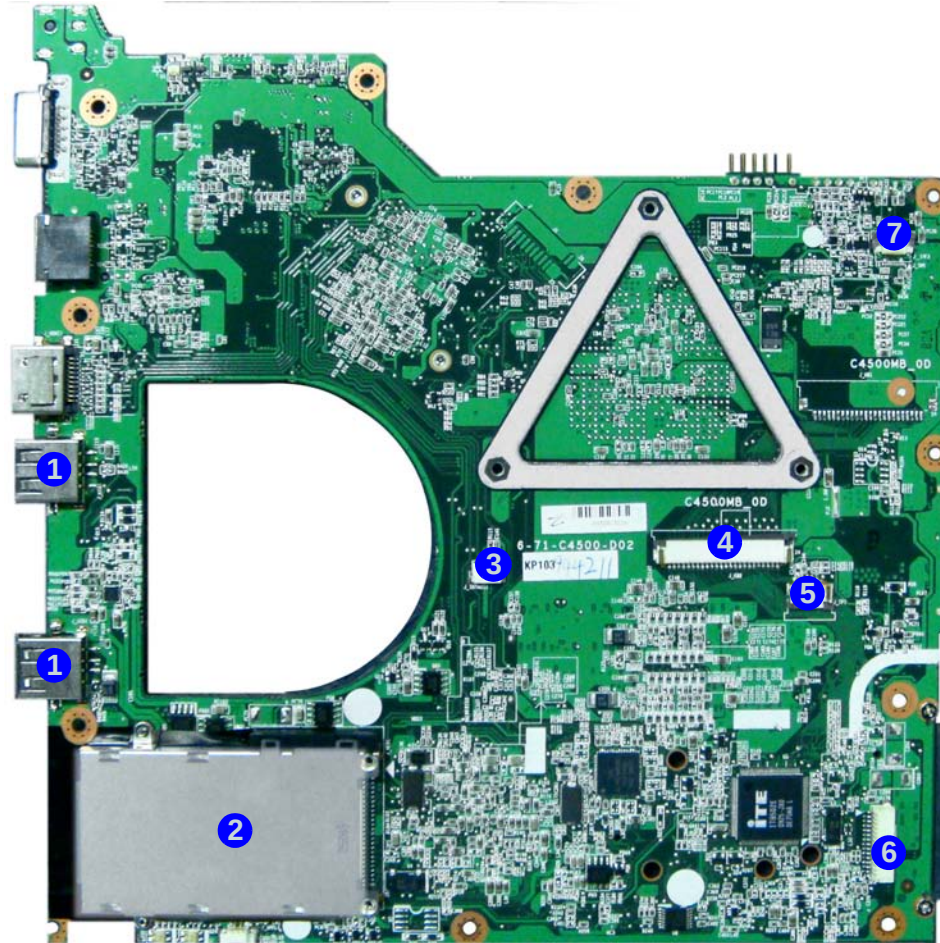
1. CPU Socket (no CPU installed)
2. NorthBridge
3. Memory Slots
DDR2 So-DIMM
4. SouthBridge
5. Realtek ALC272
6. Mini-PCle Socket
(Wireless Lan Module)

Introduction

Figure 9
**Mainboard Top
Connectors**

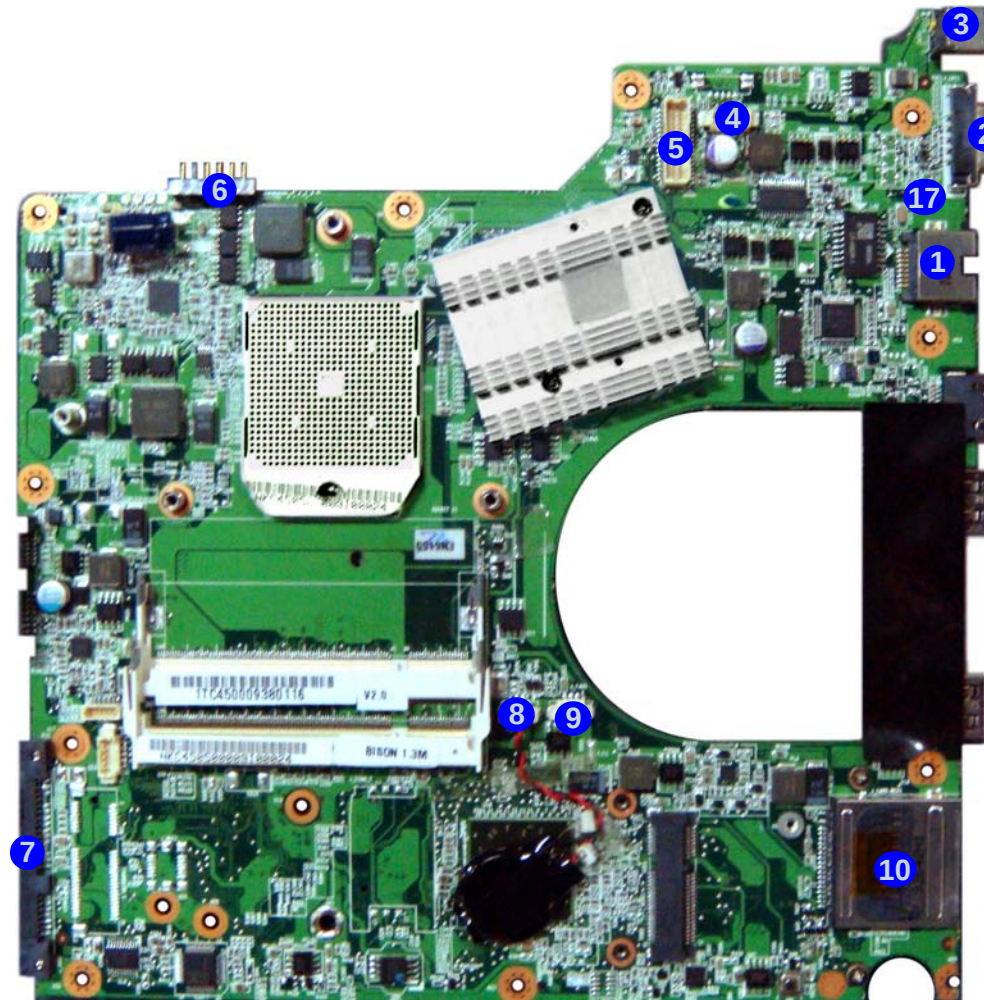
Mainboard Overview - Top (Connectors)

1. USB Port
2. ExpressCard/34 Slot
3. Internal Microphone Cable Connector
4. Keyboard Cable Connector
5. TouchPad Cable Connector
6. Audio Board Cable Connector
7. Power Switch Board Cable Connector



Mainboard Overview - Bottom (Connectors)

Figure 10
**Mainboard Bottom
Connectors**



1. RJ-45 Jack
2. CRT Port
3. DC-In Jack
4. CCD Cable Connector
5. LCD Cable Connector
6. Battery Connector
7. HDD Connector
8. CMOS Battery Connector
9. Fan Cable Connector
10. 7-in-1 Card Reader

2: Disassembly

Overview

This chapter provides step-by-step instructions for disassembling the **C4500/C4501/C4505** series notebook's parts and subsystems. When it comes to reassembly, reverse the procedures (unless otherwise indicated).

We suggest you completely review any procedure before you take the computer apart.

Procedures such as upgrading/replacing the RAM, optical device and hard disk are included in the User's Manual but are repeated here for your convenience.

To make the disassembly process easier each section may have a box in the page margin. Information contained under the figure # will give a synopsis of the sequence of procedures involved in the disassembly procedure. A box with a  lists the relevant parts you will have after the disassembly process is complete. **Note:** The parts listed will be for the disassembly procedure listed ONLY, and not any previous disassembly step(s) required. Refer to the part list for the previous disassembly procedure. The amount of screws you should be left with will be listed here also.

A box with a  will also provide any possible helpful information. A box with a  contains warnings.

An example of these types of boxes are shown in the sidebar.


Information
Warning

Disassembly

NOTE: All disassembly procedures assume that the system is turned **OFF**, and disconnected from any power supply (the battery is removed too).

Maintenance Tools

The following tools are recommended when working on the notebook PC:

- M3 Philips-head screwdriver
- M2.5 Philips-head screwdriver (magnetized)
- M2 Philips-head screwdriver
- Small flat-head screwdriver
- Pair of needle-nose pliers
- Anti-static wrist-strap

Connections

Connections within the computer are one of four types:

Locking collar sockets for ribbon connectors	To release these connectors, use a small flat-head screwdriver to gently pry the locking collar away from its base. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.
Pressure sockets for multi-wire connectors	To release this connector type, grasp it at its head and gently rock it from side to side as you pull it out. Do not pull on the wires themselves. When replacing the connection, do not try to force it. The socket only fits one way.
Pressure sockets for ribbon connectors	To release these connectors, use a small pair of needle-nose pliers to gently lift the connector away from its socket. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.
Board-to-board or multi-pin sockets	To separate the boards, gently rock them from side to side as you pull them apart. If the connection is very tight, use a small flat-head screwdriver - use just enough force to start.

Maintenance Precautions

The following precautions are a reminder. To avoid personal injury or damage to the computer while performing a removal and/or replacement job, take the following precautions:

1. **Don't drop it.** Perform your repairs and/or upgrades on a stable surface. If the computer falls, the case and other components could be damaged.
2. **Don't overheat it.** Note the proximity of any heating elements. Keep the computer out of direct sunlight.
3. **Avoid interference.** Note the proximity of any high capacity transformers, electric motors, and other strong magnetic fields. These can hinder proper performance and damage components and/or data. You should also monitor the position of magnetized tools (i.e. screwdrivers).
4. **Keep it dry.** This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.
5. **Be careful with power.** Avoid accidental shocks, discharges or explosions.
 - Before removing or servicing any part from the computer, turn the computer off and detach any power supplies.
 - When you want to unplug the power cord or any cable/wire, be sure to disconnect it by the plug head. Do not pull on the wire.
6. **Peripherals** – Turn off and detach any peripherals.
7. **Beware of static discharge.** ICs, such as the CPU and main support chips, are vulnerable to static electricity. Before handling any part in the computer, discharge any static electricity inside the computer. When handling a printed circuit board, do not use gloves or other materials which allow static electricity buildup. We suggest that you use an anti-static wrist strap instead.
8. **Beware of corrosion.** As you perform your job, avoid touching any connector leads. Even the cleanest hands produce oils which can attract corrosive elements.
9. **Keep your work environment clean.** Tobacco smoke, dust or other air-born particulate matter is often attracted to charged surfaces, reducing performance.
10. **Keep track of the components.** When removing or replacing any part, be careful not to leave small parts, such as screws, loose inside the computer.

Cleaning

Do not apply cleaner directly to the computer, use a soft clean cloth.

Do not use volatile (petroleum distillates) or abrasive cleaners on any part of the computer.



Power Safety Warning

Before you undertake any upgrade procedures, make sure that you have turned off the power, and disconnected all peripherals and cables (including telephone lines). It is advisable to also remove your battery in order to prevent accidentally turning the machine on.

Disassembly Steps

The following table lists the disassembly steps, and on which page to find the related information. **PLEASE PERFORM THE DISASSEMBLY STEPS IN THE ORDER INDICATED.**

To remove the Battery:

1. Remove the battery [page 2 - 5](#)

To remove the HDD:

1. Remove the battery [page 2 - 5](#)
2. Remove the HDD [page 2 - 6](#)

To remove the Optical Device:

1. Remove the battery [page 2 - 5](#)
2. Remove the Optical device [page 2 - 8](#)

To remove the System Memory:

1. Remove the battery [page 2 - 5](#)
2. Remove the system memory [page 2 - 9](#)

To remove and install a Processor:

1. Remove the battery [page 2 - 5](#)
2. Remove the processor [page 2 - 10](#)
3. Install the processor [page 2 - 12](#)

To remove the 3G Module:

1. Remove the battery [page 2 - 5](#)
2. Remove the 3G module [page 2 - 13](#)

To remove the Wireless LAN Module:

1. Remove the battery [page 2 - 5](#)
2. Remove the WLAN module [page 2 - 14](#)

To remove the Bluetooth Module:

1. Remove the battery [page 2 - 5](#)
2. Remove the Bluetooth Module [page 2 - 15](#)

To remove the LCD Front Cover:

1. Remove the battery [page 2 - 5](#)
2. Remove the LCD Front Cover [page 2 - 16](#)

To remove the Inverter Board:

1. Remove the battery [page 2 - 5](#)
2. Remove the inverter board [page 2 - 17](#)

To remove the Keyboard:

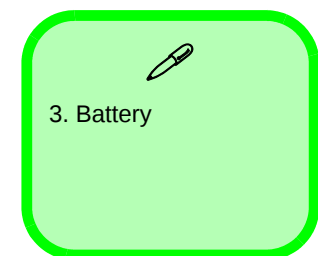
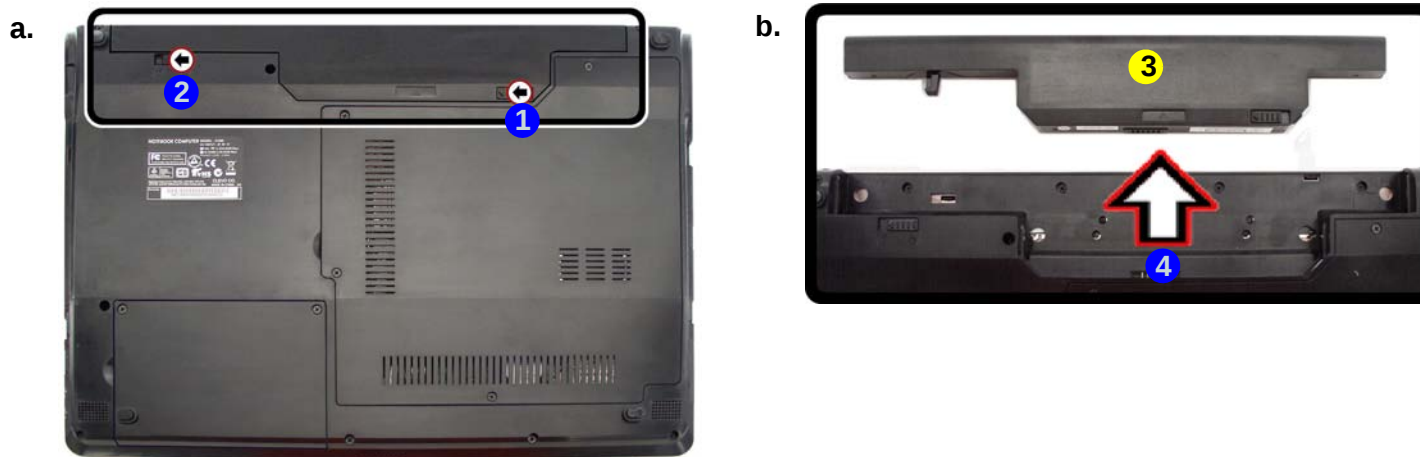
1. Remove the battery [page 2 - 5](#)
2. Remove the keyboard [page 2 - 18](#)

Removing the Battery

1. Turn the computer off, and turn it over.
2. Slide the latch ① in the direction of the arrow.
3. Slide the latch ② in the direction of the arrow, and hold it in place.
4. Slide the battery ③ out in the direction of the arrow ④.

Figure 1
Battery Removal

- a. Slide latch towards the unlock symbol and hold it in place.
- b. Slide the battery out.



Disassembly

Figure 2
**HDD Assembly
Removal**

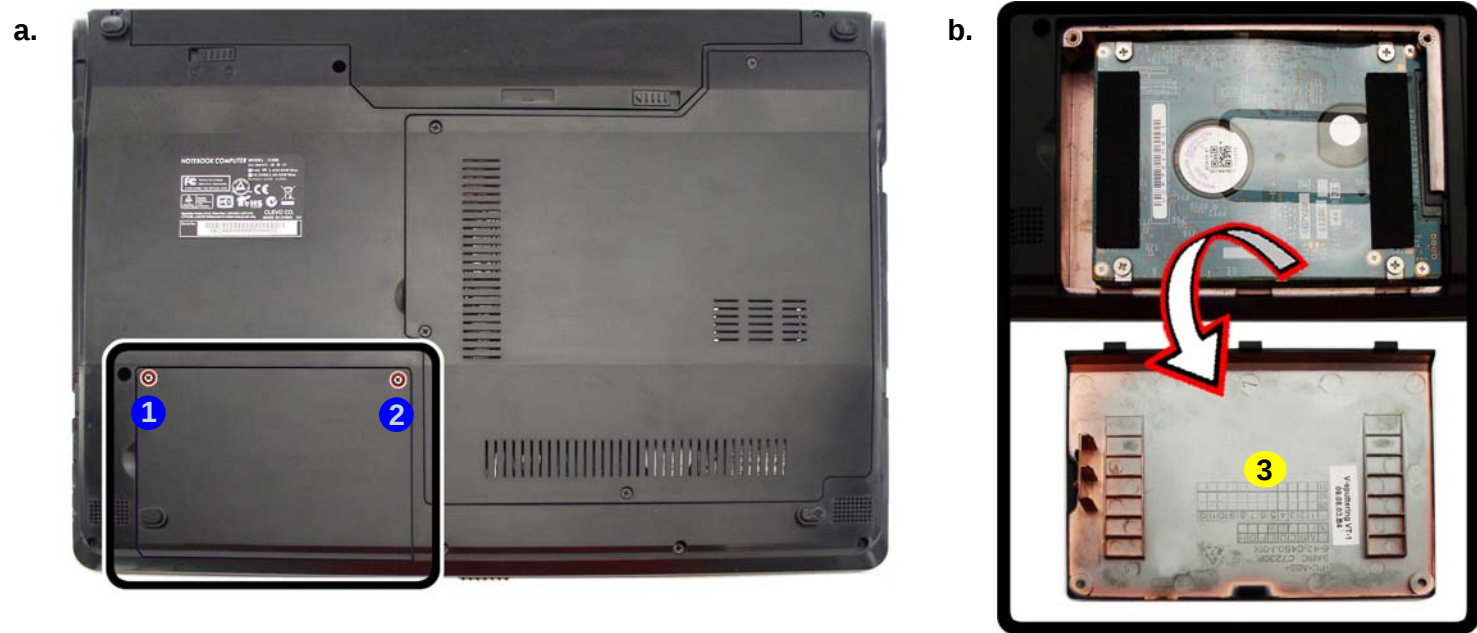
- Remove the screws.
- Remove the cover and locate the hdd.

Removing the Hard Disk Drive

The hard disk drive is mounted in a removable case and can be taken out to accommodate other 2.5" serial (SATA) hard disk drives with a height of 9.5mm (h). Follow your operating system's installation instructions, and install all necessary drivers and utilities (as outlined in **Chapter 4 of the User's Manual**) when setting up a new hard disk.

Hard Disk Upgrade Process

- Turn **off** the computer, and turn it over and remove the battery ([page 2 - 5](#)).
- Locate the hard disk bay cover and loosen screws **1** & **2**.
- Carefully remove the HDD bay cover **3**.

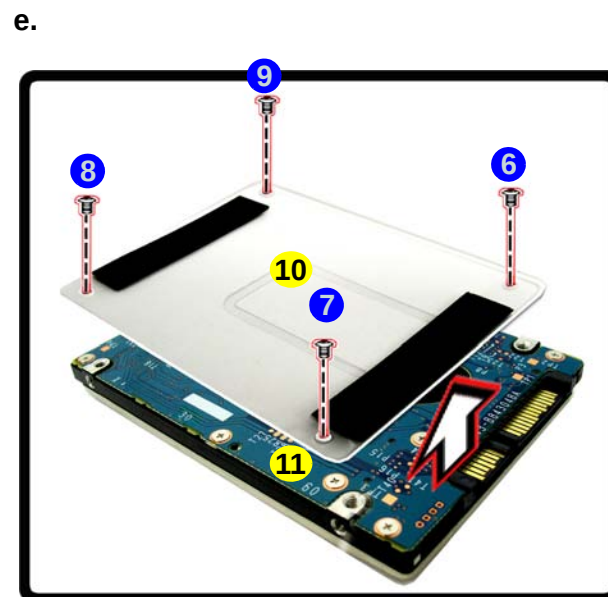
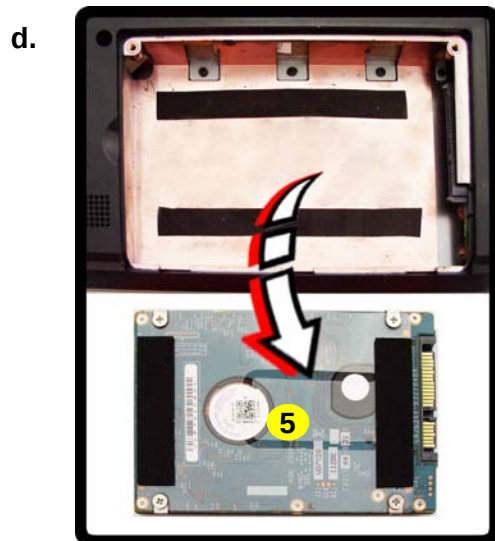
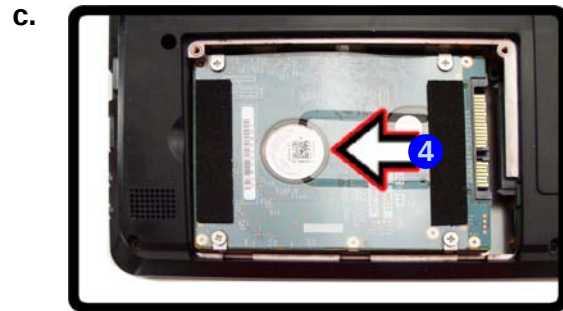


- 
8. Hard Disk Bay Cover
- 2 Screws

4. Grip the tab and slide the hard disk in the direction of arrow 4.
5. Lift the hard disk assembly 5 out of the bay.
6. Remove the screw(s) 6 - 9 and the adhesive cover 10 from the HDD 11.
7. Reverse the process to install a new hard disk drive (do not forget to replace all the screws and covers).

Figure 3
**HDD Assembly
Removal (cont'd)**

- c. Grip the tab and slide the HDD assembly in the direction of the arrow
- d. Lift the HDD assembly out.
- e. Remove the screws and adhesive cover from the HDD.



10 HDD Adhesive Cover
11. HDD

- 4 Screws

Disassembly

Figure 4
**Optical Device
Removal**

- a. Remove the screws.
- b. Remove the cover.
- c. Remove the screw.
- b. Push the optical device out of the computer at point 8.

Removing the Optical (CD/DVD) Device

1. Turn **off** the computer, turn it over and remove the battery ([page 2 - 5](#)).
2. Locate the component bay cover and remove screws **1** - **4**.
3. Carefully (**a fan and cable are attached to the under side of the cover**) lift up the bay cover.
4. Carefully disconnect the fan cable **5**, and remove the cover **6**.
5. Remove the screw at point **7**, and use a screwdriver to carefully push out the optical device **9** at point **8** out of the computer.
6. Insert the new device and carefully slide it into the computer (the device only fits one way. DO NOT FORCE IT; The screw holes should line up).
7. Restart the computer to allow it to automatically detect the new device.

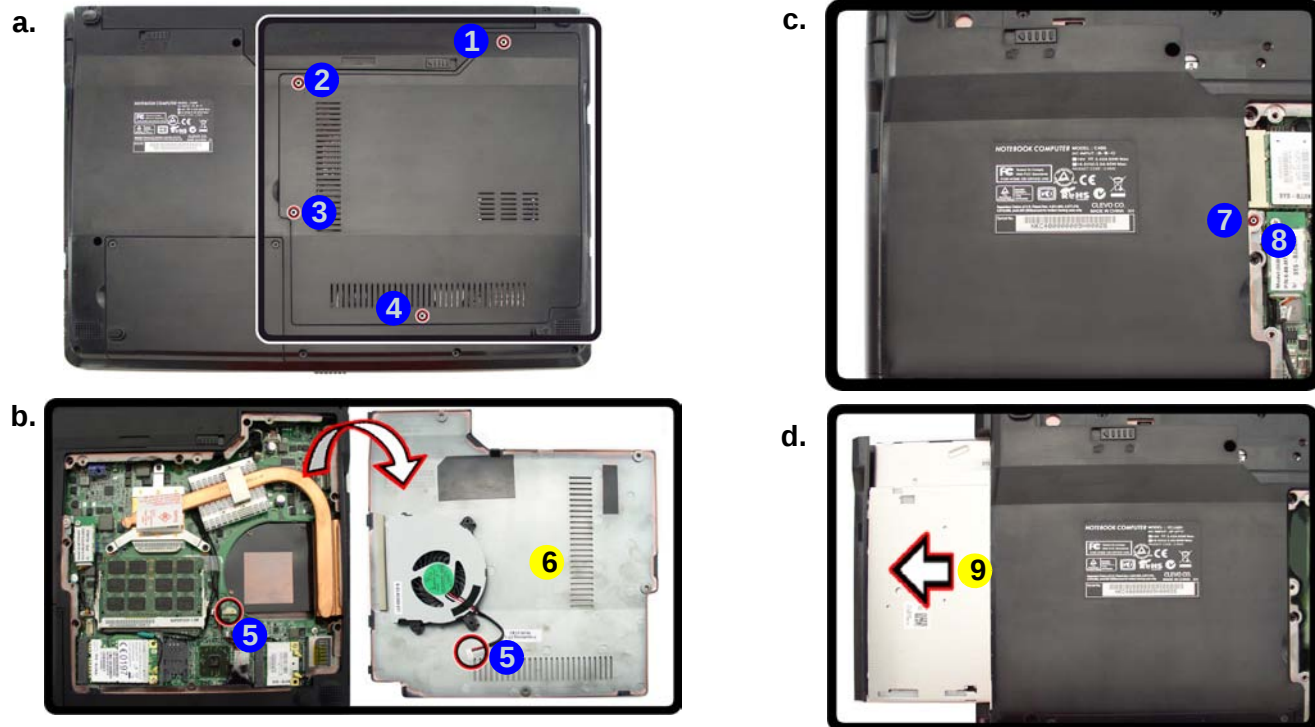


Fan Cable

Make sure you reconnect the fan cable **5** (see [page 2 - 6](#)) before screwing down the bay cover.



- 6. Component Bay Cover
- 9. Optical Device
- 5 Screws

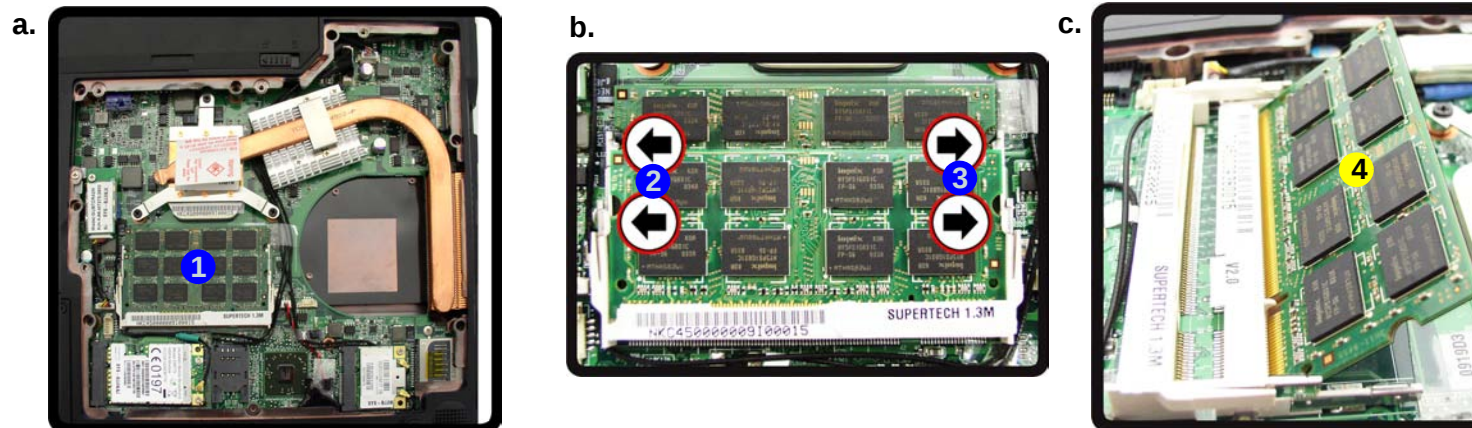


Removing the System Memory (RAM)

The computer has two memory sockets for 200 pin Small Outline Dual In-line Memory Modules (SO-DIMM) supporting DDRII (DDR2) 667MHz/800 MHz. The main memory can be expanded up to 4GB. The SO-DIMM modules supported are 1024MB and 2048MB **DDRII** Modules. The total memory size is automatically detected by the POST routine once you turn on your computer.

Memory Upgrade Process

1. Turn **off** the computer, turn it over and remove the battery ([page 2 - 5](#)) and the component bay cover ([page 2 - 6](#)).
2. The RAM module(s) will be visible at point **1** on the mainboard.
3. Gently pull the two release latches (**2** & **3**) on the sides of the memory socket in the direction indicated by the arrows ([Figure 5b](#)).



4. The RAM module(s) **4** will pop-up ([Figure 5c](#)), and you can then remove it.
5. Pull the latches to release the second module if necessary.
6. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
7. The module will only fit one way as defined by its pin alignment. Make sure the module is seated as far into the slot as it will go. **DO NOT FORCE IT**; it should fit without much pressure.
8. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
9. Replace the component bay cover and the screws (**make sure you reconnect the fan cable before screwing down the bay cover**).
10. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.

Figure 5
RAM Module
Removal

- a. Locate the memory socket.
- b. Pull the release latch(es).
- c. Remove the module(s).



Contact Warning

Be careful not to touch the metal pins on the module's connecting edge. Even the cleanest hands have oils which can attract particles, and degrade the module's performance.



4. RAM Module

Disassembly

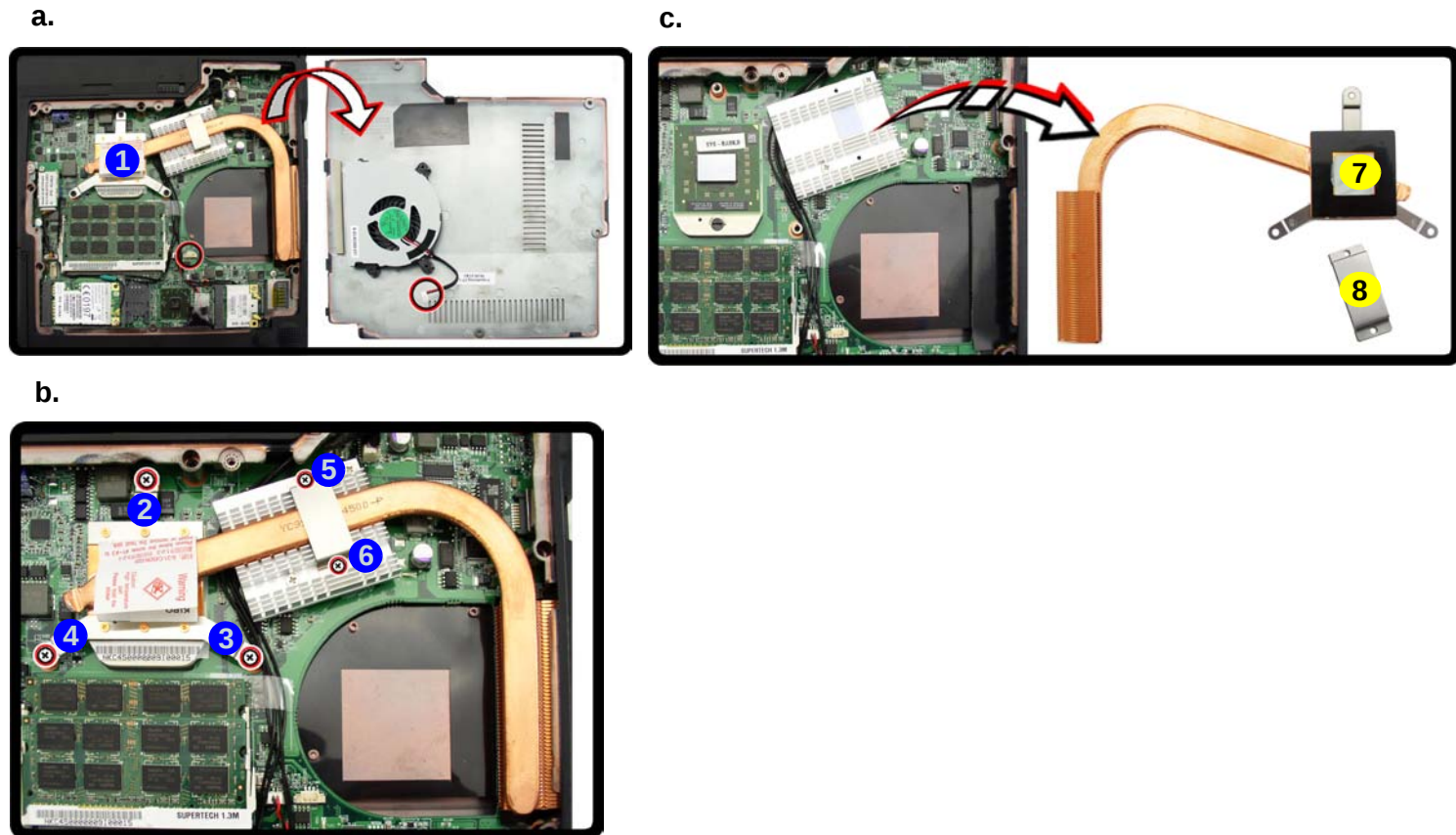
Figure 6
Processor Removal

- Locate the heat sink.
- Remove the screws from the CPU heatsink and bracket.
- Remove the CPU heat sink and bracket.

Removing and Installing a Processor

Processor Removal Procedure

- Turn **off** the computer, turn it over, and remove the battery ([page 2 - 5](#)) and the component bay cover ([page 2 - 6](#)).
- The heat sink will be visible at point **1** on the mainboard
- Remove the screws **2** - **4** from the heat sink in the order indicated ([Figure 6b](#)).
- Remove the screws **5** & **6** from the bracket on the Northbridge heat sink ([Figure 6b](#)).
- Carefully lift the CPU heat sink **7** and metal bracket **8** ([Figure 6c](#)) up off the computer.



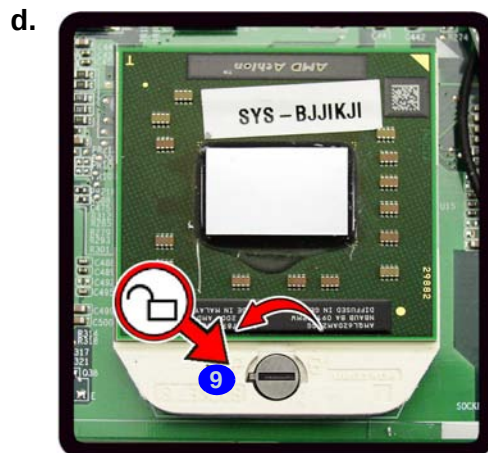
- CPU Heat Sink
- Bracket

- 5 Screws

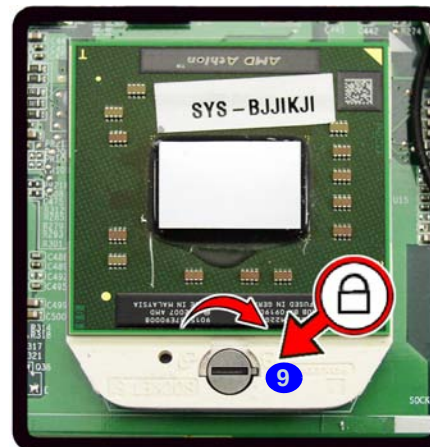
6. Turn the release latch **9** towards the unlock symbol  to release the CPU.
7. Carefully (it may be hot) lift the CPU **10** up and out of the socket (**Figure 7e**).
8. Reverse the process to install a new CPU.
9. When re-inserting the CPU, pay careful attention to the pin alignment, it will fit only one way (DO NOT FORCE IT!).

Figure 7
Processor Removal (cont'd)

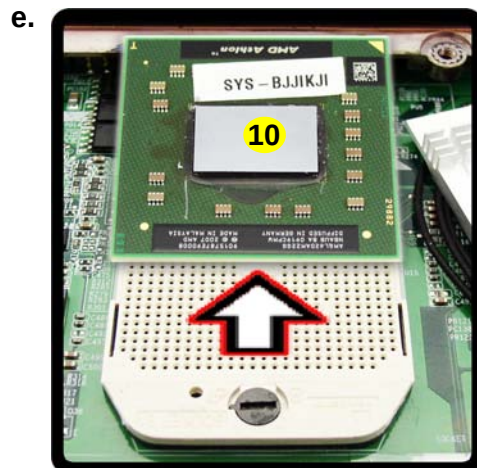
- d. Turn the release latch to unlock the CPU.
- e. Lift the CPU out of the socket.



Unlock



Lock



Caution

The heat sink, and CPU area in general, contains parts which are subject to high temperatures. Allow the area time to cool before removing these parts.



10. CPU

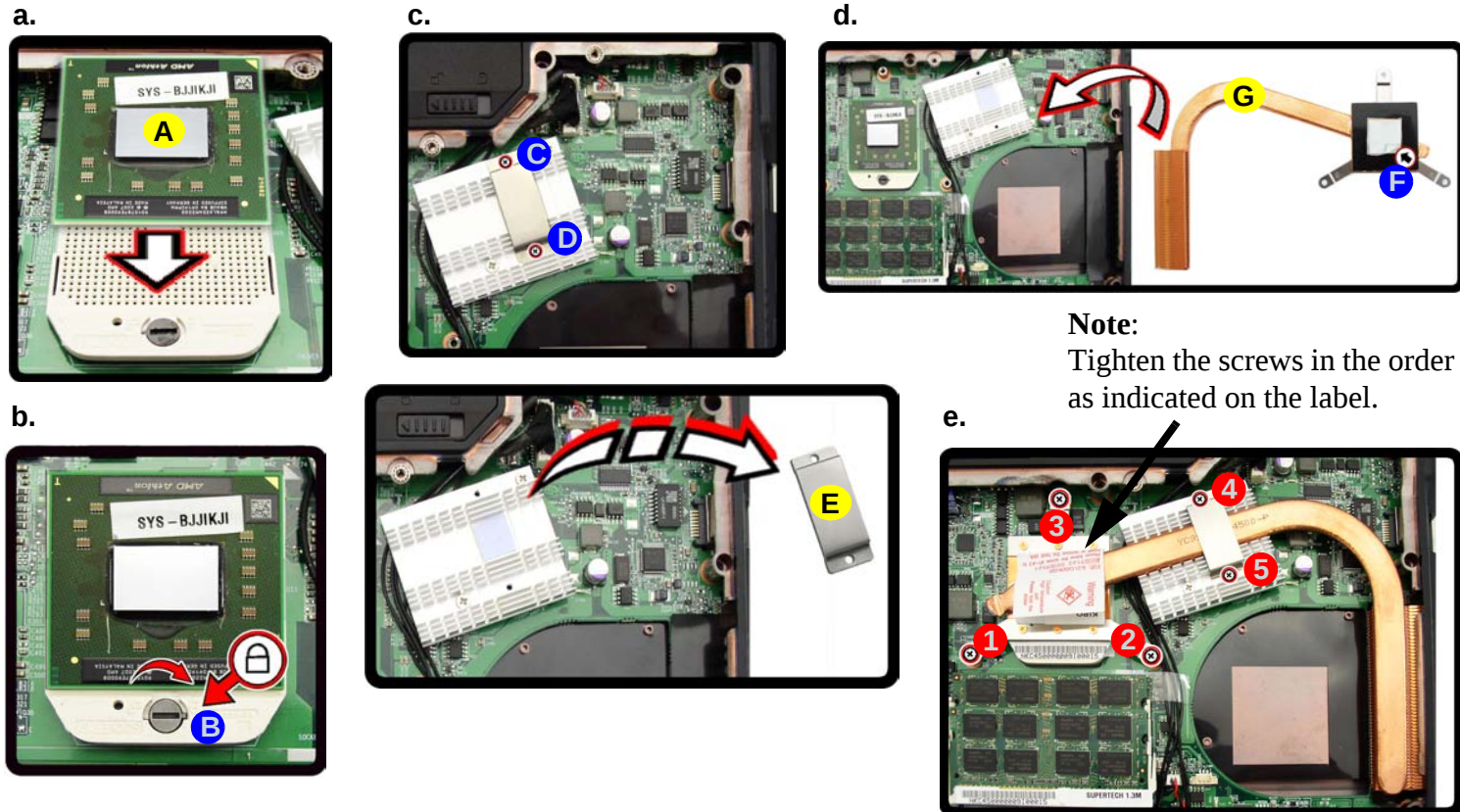
Disassembly

Figure 8
Processor Installation

- Insert the CPU.
- Turn the release latch towards the lock symbol.
- Remove the screws and lift the bracket off the Northbridge heat sink.
- Remove the sticker from the heat sink and insert the heat sink.
- Tighten the screws.

Processor Installation Procedure

- Insert the CPU **A**, pay careful attention to the pin alignment, it will fit only one way (DO NOT FORCE IT!), and turn the release latch **B** towards the lock symbol  (*Figure 8b*).
- Remove the screws **C** - **D** and lift the metal bracket **E** off the Northbridge heat sink (*Figure 6b*).
- Remove the sticker **F**** (*Figure 8c*) from the heat sink.
- Insert the heat sink **G** as indicated in *Figure 8c*.
- Tighten the CPU heat sink screws in the order **1** to **3** (the order as indicated on the label in *Figure 8d*) and bracket screws **4** & **5**.
- Replace the component bay cover and tighten the screws (see *page 2 - 6*).



A. CPU
E. Bracket
G. Heat Sink

Removing the 3G Module

1. Turn **off** the computer, turn it over, and remove the battery ([page 2 - 5](#)) and the component bay cover ([page 2 - 6](#)).
2. The 3G module will be visible at point **1** on the mainboard.
3. Carefully disconnect the cable **2**, and then remove the screw **3**.
4. The 3G module **4** ([Figure 10c](#)) will pop-up, and you can remove it off the computer.

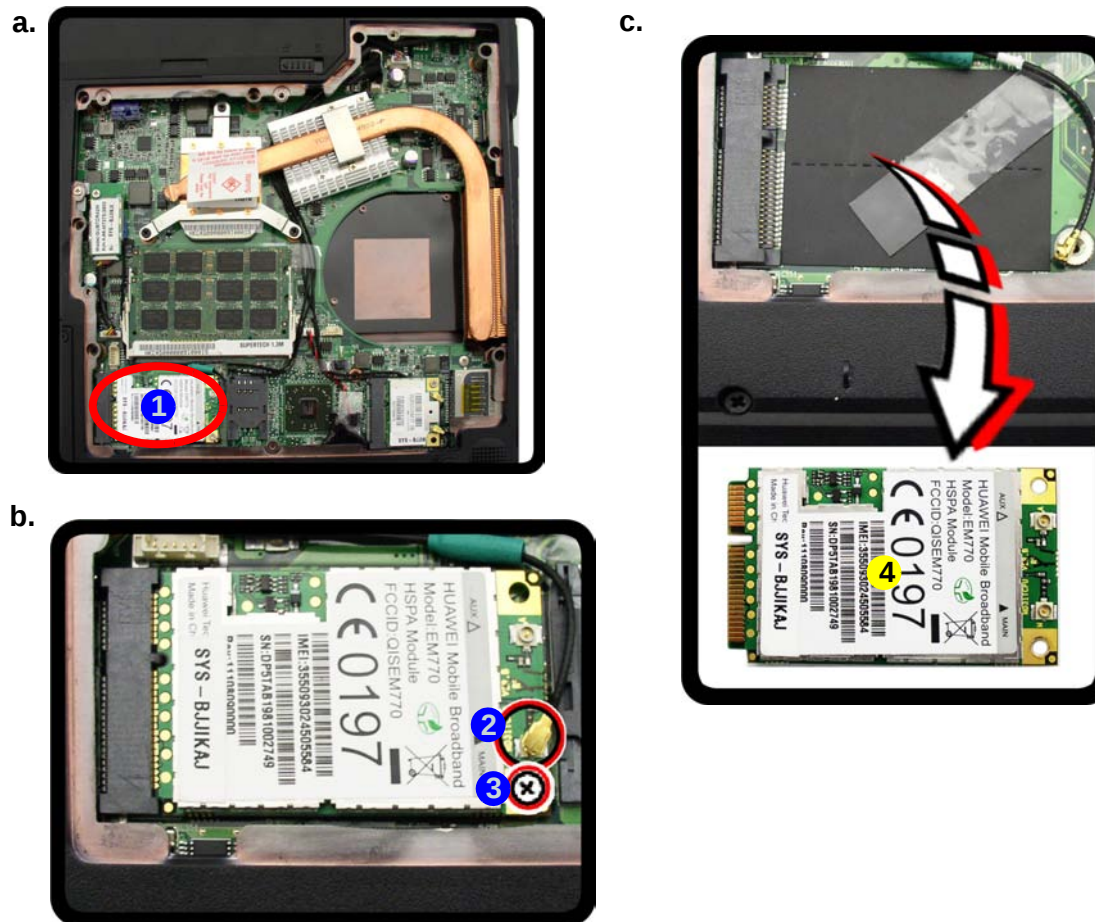
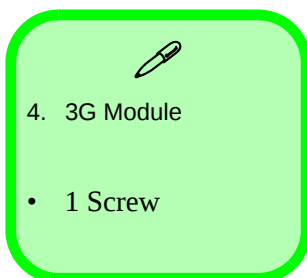


Figure 9
3G Module Removal

- a. Locate the 3G module.
- b. Disconnect the cable and remove the screw.
- c. Remove the 3G module.

Note: Make sure you reconnect the antenna cable to socket ([Figure 9b](#)).



Disassembly

Figure 10
**Wireless LAN
Module Removal**

- Locate the WLAN.
- Disconnect the cable and remove the screw.
- The WLAN module will pop up.
- Remove the Wireless LAN module.

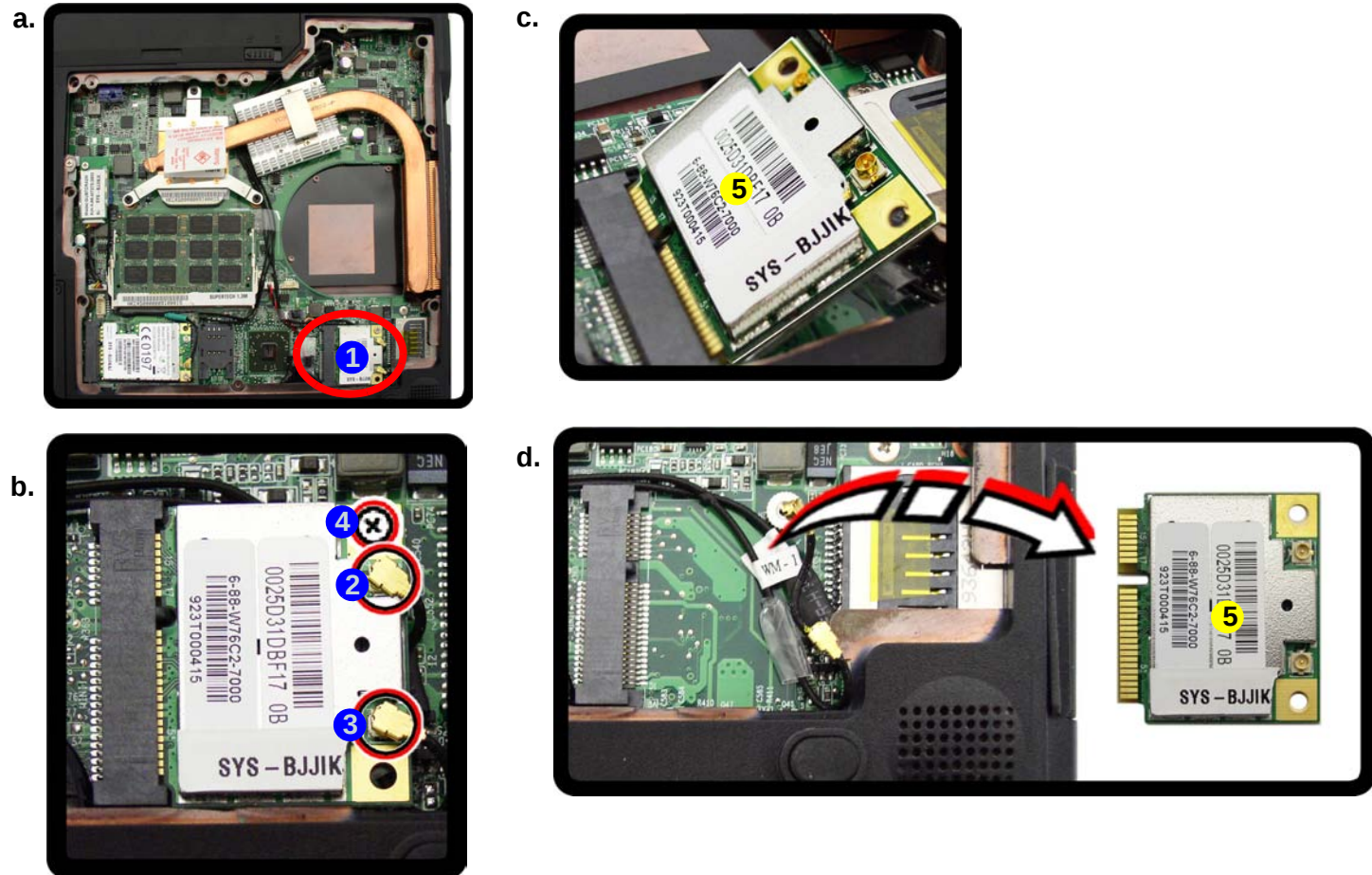
Note: Make sure you reconnect the antenna cable to the “1 + 2” socket (*Figure 10b*).

5. Wireless LAN
Module

- 1 Screw

Removing the Wireless LAN Module

- Turn **off** the computer, turn it over, and remove the battery (*page 2 - 5*) and the component bay cover (*page 2 - 6*).
- The wireless LAN module will be visible at point **1** on the mainboard.
- Carefully disconnect the cables **2** - **3**, and then remove the screw **4**.
- The wireless LAN module **5** (*Figure 10c*) will pop-up, and you can remove it off the computer.



Removing the Bluetooth Module

1. Turn **off** the computer, turn it over, and remove the battery ([page 2 - 5](#)) and the component bay cover ([page 2 - 6](#)).
2. The Bluetooth module will be visible at point **1** on the mainboard.
3. Remove the screw **2** and turn the module over.
4. Carefully disconnect the cable **3** and separate the connector **4** ([Figure 11b](#)) from the Bluetooth Module.
5. Lift the Bluetooth Module **5** ([Figure 11c](#)) up and off the computer.

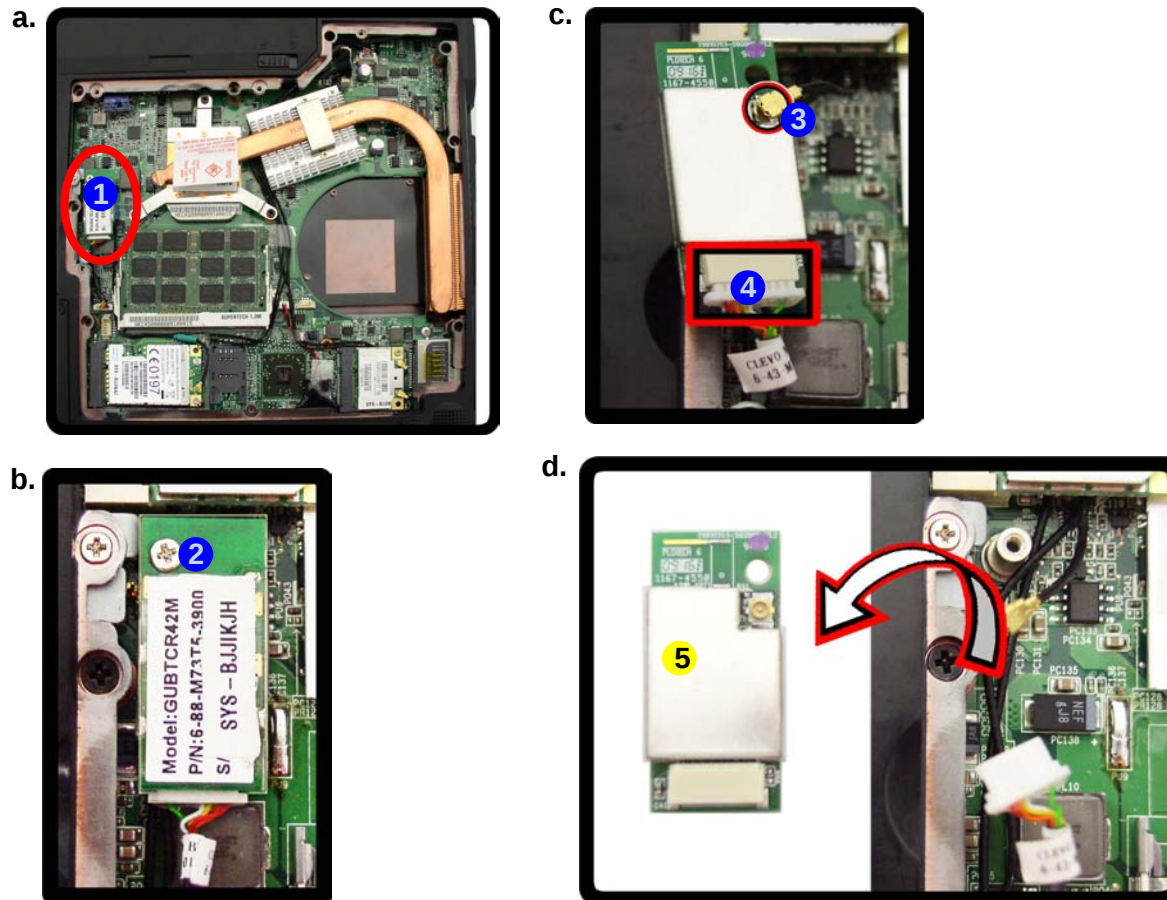


Figure 11
**Bluetooth Module
Removal**

- a. Locate the Bluetooth module.
- b. Remove the screw.
- c. Disconnect the cable and the connector from the bluetooth module.
- d. Lift the Bluetooth module out.



5. Bluetooth Module

- 1 Screw

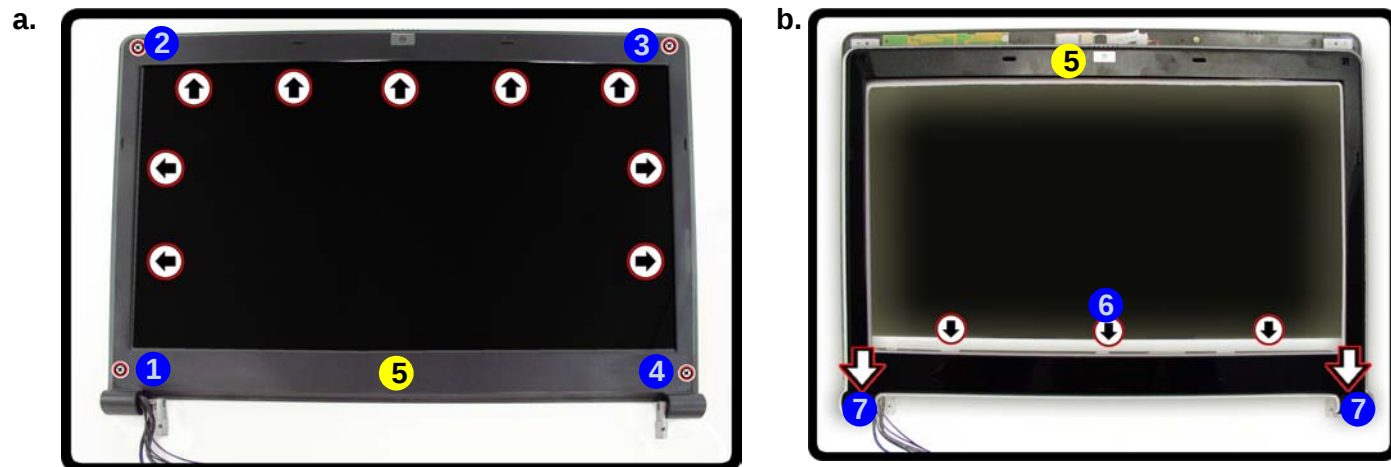
Disassembly

Figure 12
LCD Front Cover Removal

- a. Remove the screws and unsnap the LCD front cover from the LCD panel.
- b. Slide the LCD panel cover in the direction of the arrow.

Removing the LCD Front Cover

1. Turn **off** the computer, and remove the battery ([page 2 - 5](#)).
2. Remove any rubber covers and screws **1** - **4** ([Figure 12a](#)), then run your finger around the middle of the frame to carefully unsnap the LCD front cover **5** from the LCD panel.
3. After unsnapping all four sides of the LCD front cover, carefully slide the LCD front cover downwards in the direction of the arrow **6** (be careful of the LCD hinges at point **7**).
4. You can now remove the LCD front cover.



5. LCD Front Cover

- 4 Screws



Rubber Screw Covers

After removing the rubber screw covers, place them on a clean dry surface (or attach them to the front cover itself) in order to prevent loss of adhesive.

Removing the Inverter Board

1. Turn **off** the computer, remove the battery ([page 2 - 5](#)) and remove LCD front cover ([page 2 - 16](#)).
2. Discharge the remaining system power (see [Inverter Power Warning](#) below).
3. Remove screw **1** ([Figure 13b](#)) from the inverter, and carefully lift the inverter board up slightly.
4. Disconnect cables **2** & **3** ([Figure 13c](#)) from the inverter, then remove the inverter **4** ([Figure 13d](#)) from the top case assembly.



Inverter Power Warning

In order to prevent a short circuit when removing the inverter it is necessary to discharge any remaining system power. To do so, press the computer's power button for a few seconds before disconnecting the inverter cable.

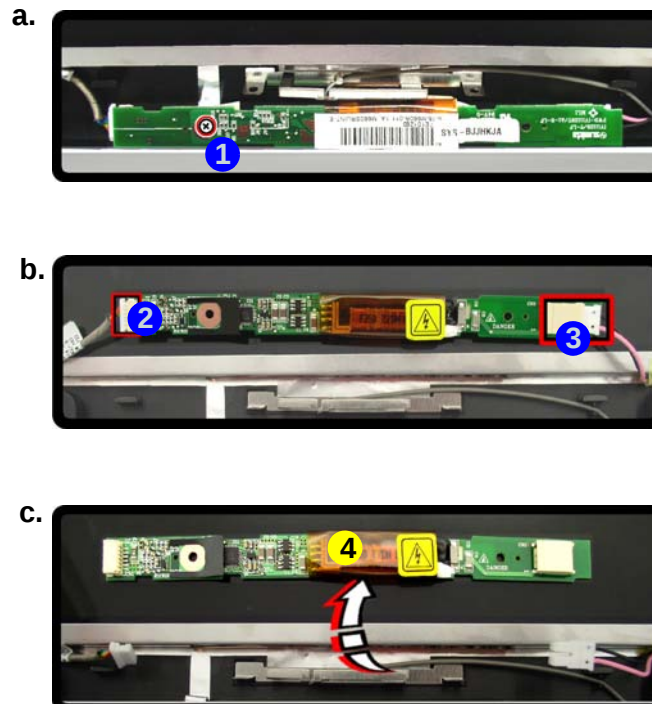


Figure 13
Inverter Board Removal

- a. Remove the screw from the inverter board and lift the board up slightly.
- b. Disconnect the cables from the inverter.
- c. Remove the inverter.

Note: C4500 LCD does not have Inverter board.



4. Inverter Board

- 1 Screw

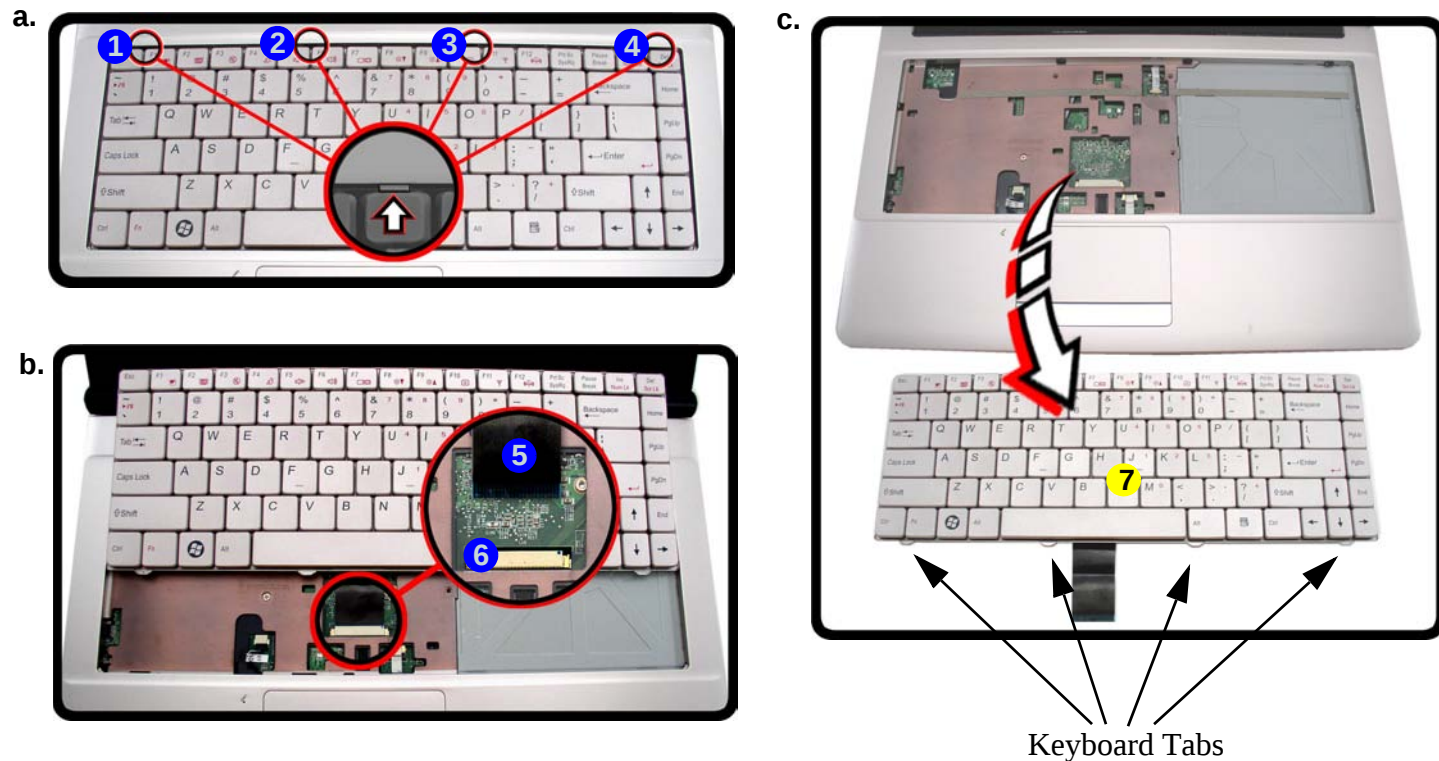
Disassembly

Figure 14
Keyboard Removal

- Press the four latches to release the keyboard.
- Lift the keyboard up and disconnect the cable from the locking collar.
- Remove the keyboard.

Removing the Keyboard

- Turn **off** the computer, and remove the battery ([page 2 - 5](#)).
- Press the **four** keyboard latches **1** - **4** at the top of the keyboard to elevate the keyboard from its normal position (you may need to use a small screwdriver to do this).
- Carefully lift the keyboard up, being careful not to bend the keyboard ribbon cable **5** ([Figure 14b](#)).
- Disconnect the keyboard ribbon cable **5** from the locking collar socket **6**.
- Carefully lift up the keyboard **7** ([Figure 14c](#)) off the computer.



Re-Inserting the Keyboard

When re-inserting the keyboard firstly align the **four** keyboard tabs at the bottom ([Figure 14d](#)) at the bottom of the keyboard with the slots in the case.

7. Keyboard

Appendix A:Part Lists

This appendix breaks down the *C4500/C4501/C4505* series notebook’s construction into a series of illustrations. The component part numbers are indicated in the tables opposite the drawings.

Note: This section indicates the *manufacturer’s* part numbers. Your organization may use a different system, so be sure to cross-check any relevant documentation.

Note: Some assemblies may have parts in common (especially screws). However, the part lists DO NOT indicate the total number of duplicated parts used.

Note: Be sure to check any update notices. The parts shown in these illustrations are appropriate for the system at the time of publication. Over the product life, some parts may be improved or re-configured, resulting in *new* part numbers.

Part Lists

Part List Illustration Location

The following table indicates where to find the appropriate part list illustration.

Table A - 1
**Part List Illustration
Location**

Part	C4500/C4501	C4505
Top	<i>page A - 3</i>	
Top		<i>page A - 4</i>
Bottom	<i>page A - 5</i>	
LCD	<i>page A - 6</i>	
DVD-ROM Drive	<i>page A - 7</i>	
HDD	<i>page A - 8</i>	

Top (C4500/C4501)

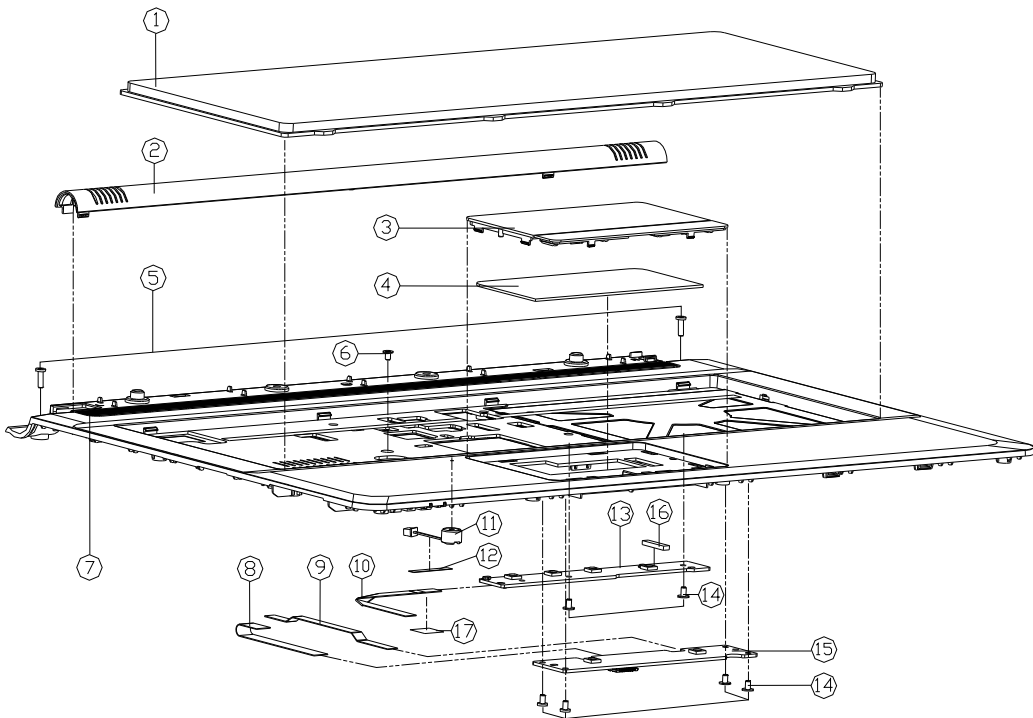
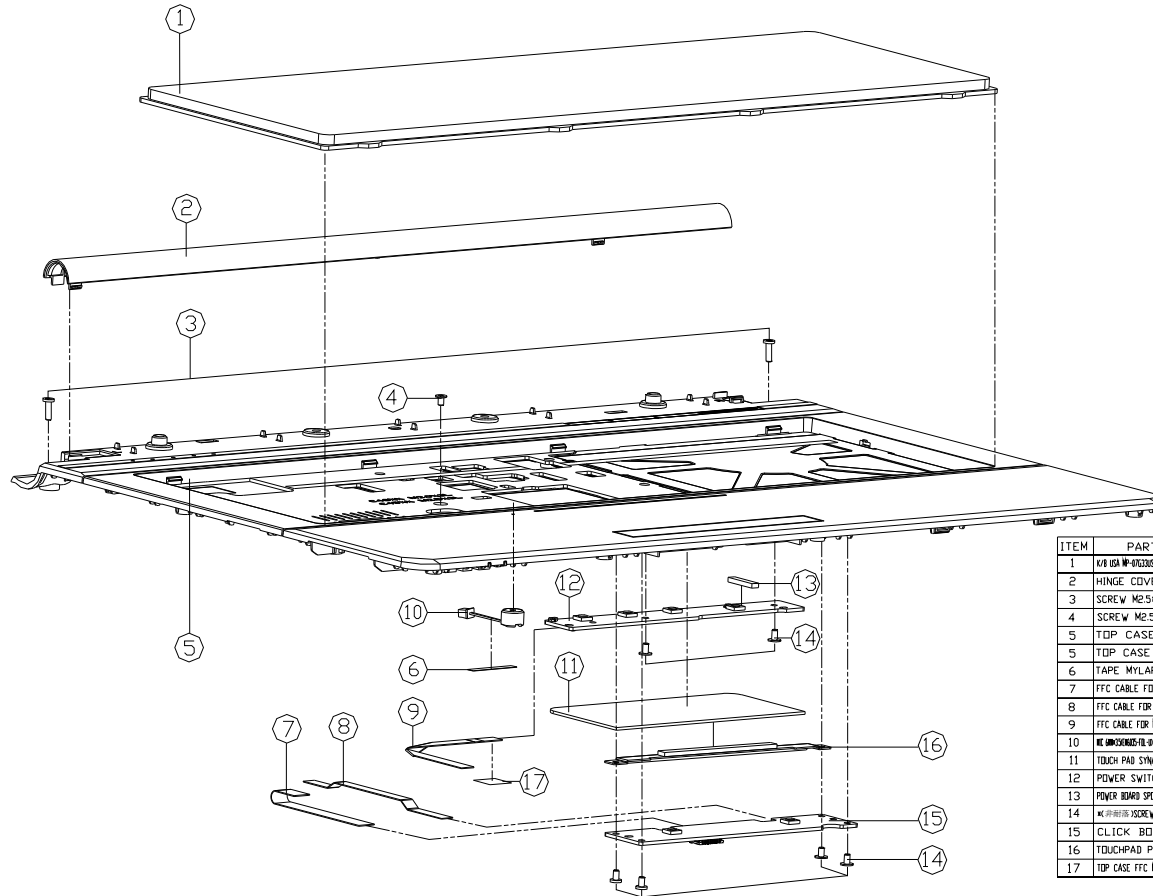


Figure A - 1
Top (C4500/C4501)

ITEM	PART NAME	PART NO	REMARK
1	KIA 02-10-10535-00 CABLE (FOR) WITH VISA KIT (P) (P)	6-80-4500-010-1	FDR C4500-C4100
1	KIA 02-10-10535-00 CABLE (FOR) WITH VISA KIT (P) (P)	6-80-W8470-011-1	FDR C4501
2	HINGE COVER (PC+ABS) C4500 (P)	6-42-4502-071	FDR C4500-C4100
3	HINGE COVER (PC+ABS) C4500 (P)	6-42-4502-031	FDR C4501
3	TP COVER MODULE C4500 (P)	6-42-4502-101	
3	TP COVER MODULE C4500 (P)	6-42-4502-101	
4	TUDDH PAD SYMPHONY 10-0146-00 C4500 (P)	6-49-A4802-010	
5	SCREW M2X4BL KIT BK/2 NY ICT (P)	6-35-86125-BR0	
6	SCREW M2X3BL KIT BZ ICT NY (P)	6-35-86125-3R0	
7	TOP CASE MODULE C4500 (P)	6-39-4502-014	FDR C4500
7	TOP CASE MODULE C4500-C (P)	6-39-4502-014	FDR C4500-C
7	TOP CASE MODULE C4500 (P)	6-39-4502-013	FDR C4501
8	FTC CABLE FOR TUDDH PAD 6PIN C4500 (P)	6-43-4502-010	
9	FTC CABLE FOR W8 TO CLICK REDDS C4500 (P)	6-43-4500-022	
10	FTC CABLE FOR W8 TO POWER REDDS C4500 (P)	6-43-4500-031	
11	DE APSE (FOR) 20-21-23 (FOR) (P) (P)	6-23-EM542-012	
12	CASE MYLAR (3) MYLAR M550J (P)	6-40-M552-020	
13	POWER SWITCH BOARD V20 C4500 (P)	6-77-4505-D02	
14	CLICK BOARD XOREY NEXAL KIT NY ICT GY-PATCH (P)	6-35-B1120-3RE	
15	CLICK BOARD V20 V20 C4500 (P)	6-77-4502-002	
16	POWER REDDS SPACE CROSS-STEP G400 C4500 (P)	6-47-4502-021	
17	TP CASE FTC MYLAR GY-3M 4670 C4500 (P)	6-40-4502-030	

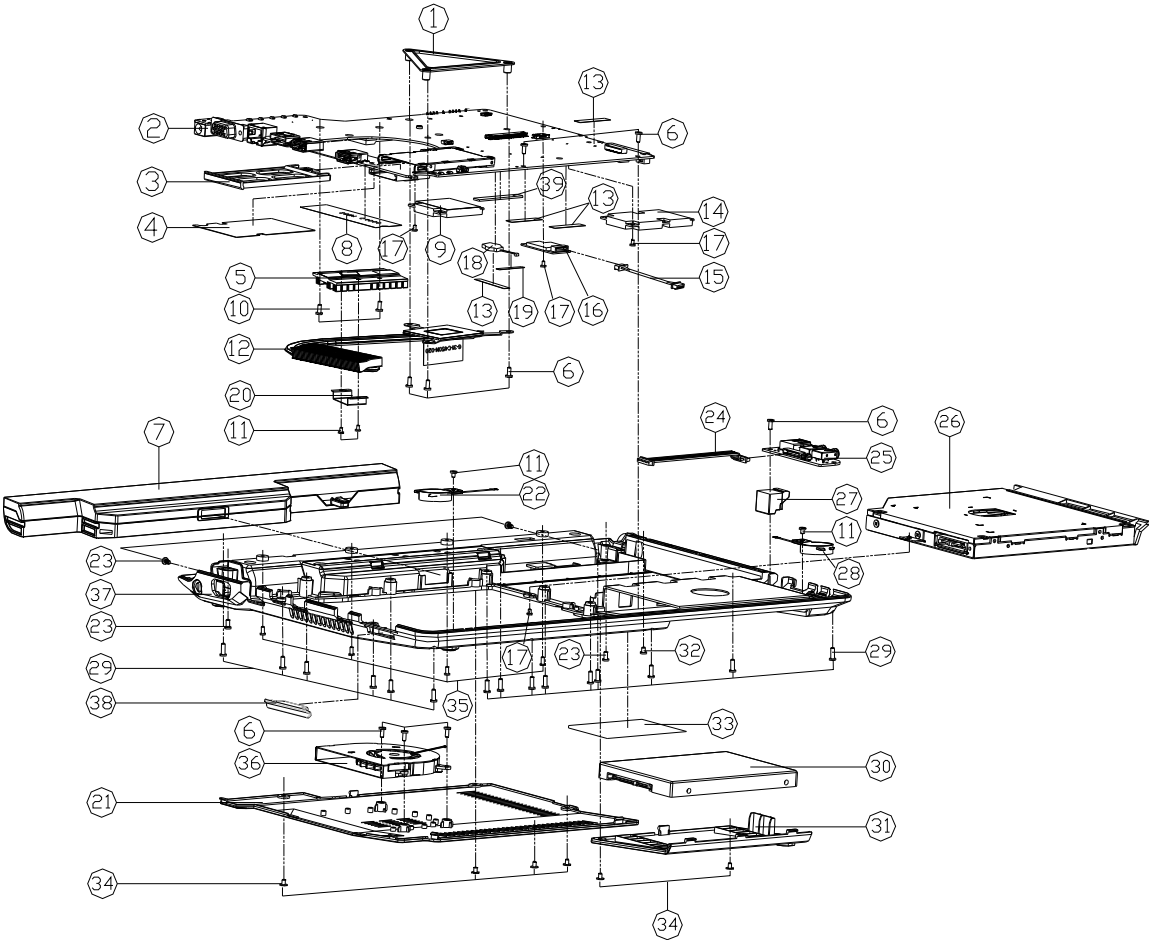
Part Lists

Top (C4505)

Figure A - 1
Top (C4505)

ITEM	PART NAME	PART NO	REMARK
1	TOP CASE W/ HINGE COVER (PC+ABS) C4505 無鉛	6-80-WB410-011-1	
2	HINGE COVER (PC+ABS) C4505 無鉛	6-42-C4552-031	
3	SCREW M2.5xBL KI BK/Z NY ICT 無鉛	6-35-B6125-8R0	
4	SCREW M2.5x3L KI BZ ICT NY+ 無鉛	6-35-B6125-3R0	
5	TOP CASE MODULE C4505-C 無鉛	6-39-C4552-012	FOR C4505/C4105
6	TAPE MYLAR (B)MYLAR M550J 無鉛	6-40-M55J2-020	FOR C4505-C
7	FFC CABLE FOR TOUCH PAD 6PIN C4500 無鉛	6-43-C4502-010	
8	FFC CABLE FOR W/R TO CLICK BOARD C4500 無鉛	6-43-C4500-022	
9	FFC CABLE FOR W/R TO POWER BOARD C4500 無鉛	6-43-C4500-031	
10	WEAR/SHIELD FILM 0.2MM 22K POLYIMIDE 無鉛	6-23-EMS4G-012	
11	TOUCH PAD SYNAPTICS TM-01146-003 C4800 無鉛	6-49-C4802-010	
12	POWER SWITCH BOARD V2.0 C4500 無鉛	6-77-C4505-D02	
13	POWER BOARD SPONGE (C4505+D02) C4800 C4500 無鉛	6-47-C4502-021	
14	WEAR/SHIELD SCREW M0.8xL KI NI ICT GY-PATCH 無鉛	6-35-B1120-3RE	
15	CLICK BOARD V2.0 C4500 無鉛	6-77-C4502-D02	
16	TOUCHPAD PLATE MODULE C4505 無鉛	6-33-C4552-101	
17	TOP CASE FFC MYLAR (PET+3M 467) C4500 無鉛	6-40-C4502-030	

Bottom



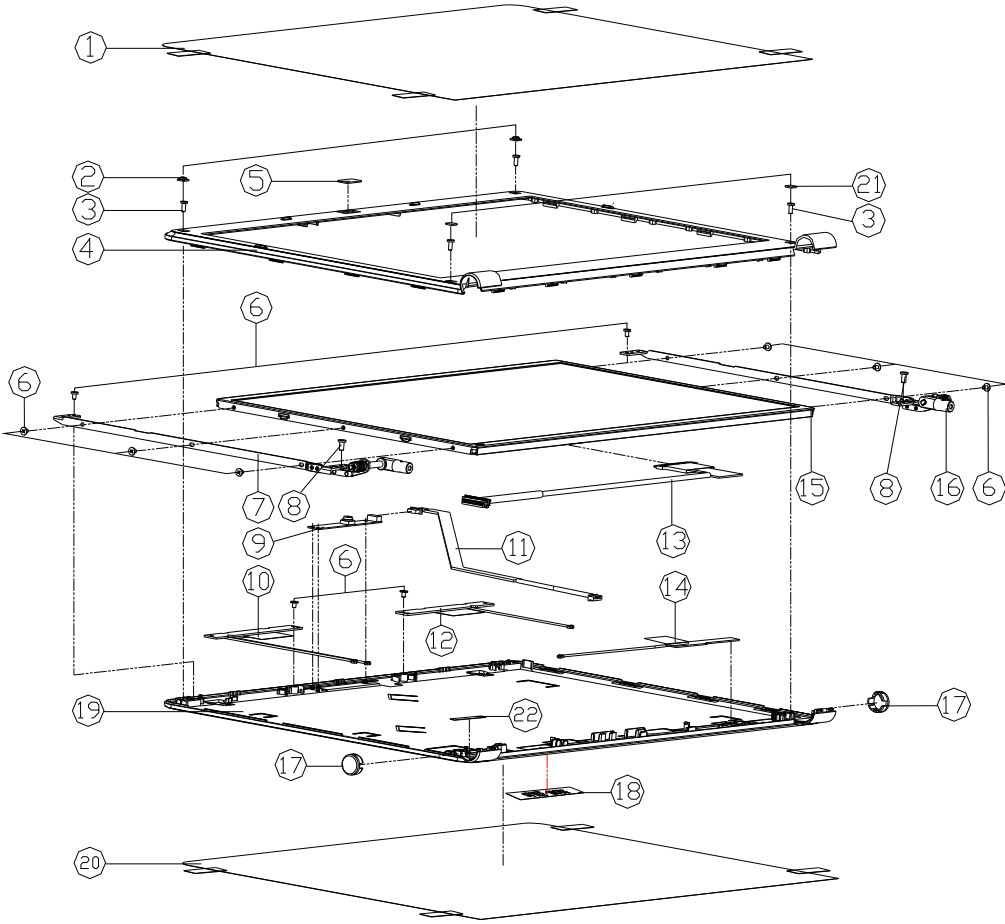
ITEM	PART NAME	PART NO	REMARK
1	CPU SUPPORT MODULE C4500	6-33-C450S-100	
2	MAIN BOARD V20A (W/D 3G) C4500	6-77-C4500-D02A	
3	DUMMY NEW CARD (ABS-PC) C4500	6-77-C4500-D02A-1	
4	MYLAR FOR NEW CARD (ABS-PC) C4500	6-42-C450B-021	
5	MYLAR FOR NEW CARD (ABS-PC) C4500	6-40-C450S-020	
6	NORTH BRIDGE HEATING MODULE C4500	6-31-C450N-010	
7	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
8	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
9	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
10	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
11	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
12	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
13	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
14	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
15	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
16	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
17	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
18	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
19	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
20	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
21	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
22	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
23	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
24	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
25	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
26	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
27	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
28	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
29	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
30	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
31	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
32	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
33	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
34	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
35	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
36	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
37	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
38	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	
39	SCREW M2.5X4 KI BK/2 ICT NY	6-35-B612S-SRA	

Figure A - 2
Bottom

A.Part Lists

LCD

Figure A - 3
LCD



ITEM	PART NAME	PART NO	REMARK
1	LCD FRONT COVER MODULE (C4500)	6-40-C4501-010	
2	LCD FRONT COVER SCREW (M5.5X1.0)	6-47-C4501-031	
3	SCREW (M5.5X1.0) (Ø5.0) (Ø5.0)	6-35-B6120-5R0	
4	LCD FRONT COVER MODULE (C4500)	6-39-C4501-012	
5	W/O CCD LENS (PMMA Ø5T C4800)	6-42-C4801-011	
6	W/O CCD LENS (PMMA Ø5T C4800)	6-42-C4801-010	
7	LCD HINGE-L SECC C4500	6-33-C4501-011	
8	LCD HINGE-R SECC C4500	6-33-C4501-011	
9	LCD CAMERA BODY (PCB)	6-88-M810C-4910	OPTION
10	LCD CAMERA BODY (PCB)	6-88-M810C-4910	OPTION
11	LCD CAMERA BODY (PCB)	6-23-7C450-032	FOR C45XX
12	LCD CAMERA BODY (PCB)	6-23-7C450-020	FOR C48XX
13	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-43-C4501-011	
14	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-23-7C450-010	FOR C48XX
15	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-23-7C450-012	FOR C45XX
16	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-43-C4801-090	FOR C48XX
17	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-43-C4801-041	FOR C48XX
18	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-23-7C450-022	FOR C45XX
19	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-23-7C450-030	FOR C48XX
20	LCD TAP (Ø5.0) (Ø5.0) (Ø5.0)	6-50-J8152-G01	FOR C48XX
21	LCD TAP (Ø5.0) (Ø5.0) (Ø5.0)	6-50-J8152-L00	FOR C48XX
22	LCD TAP (Ø5.0) (Ø5.0) (Ø5.0)	6-50-J8152-V00	FOR C48XX
23	LCD TAP (Ø5.0) (Ø5.0) (Ø5.0)	6-50-J8152-G00	FOR C48XX
24	LCD TAP (Ø5.0) (Ø5.0) (Ø5.0)	6-50-J8152-D00	FOR C45XX
25	LCD TAP (Ø5.0) (Ø5.0) (Ø5.0)	6-50-J8152-N00	FOR C45XX
26	LCD HINGE-R SECC C4500	6-33-C4501-021	
27	HINGE COSMETIC RING (ABS) (Ø5.0) (Ø5.0)	6-42-C4508-011	FOR C4500
28	HINGE COSMETIC RING (ABS) (Ø5.0) (Ø5.0)	6-42-C4518-010	FOR C4501
29	WIRE CABLE FOR CCD (Ø5.0) (Ø5.0)	6-45-M741S-020	
30	LCD BACK COVER MODULE (C4500)	6-39-C4501-022	FOR C4500
31	LCD BACK COVER MODULE (C4500)	6-39-C4501-022-C	FOR C4500-C
32	LCD BACK COVER MODULE (C4501)	6-39-C4511-021	FOR C4501
33	BACK COVER (Ø5.0) (Ø5.0) (Ø5.0)	6-39-C4801-020-0	FOR C4800Q
34	BACK COVER PROTECTION (Ø5.0) (Ø5.0) (Ø5.0)	6-40-C4501-020	FOR C4500
35	BACK COVER PROTECTION (Ø5.0) (Ø5.0) (Ø5.0)	6-40-C4511-010	FOR C4501
36	FRONT COVER (Ø5.0) (Ø5.0) (Ø5.0)	6-40-C4501-071	
37	TAPE (MYLAR) (Ø5.0) (Ø5.0) (Ø5.0)	6-40-M55J2-020	

DVD-ROM Drive

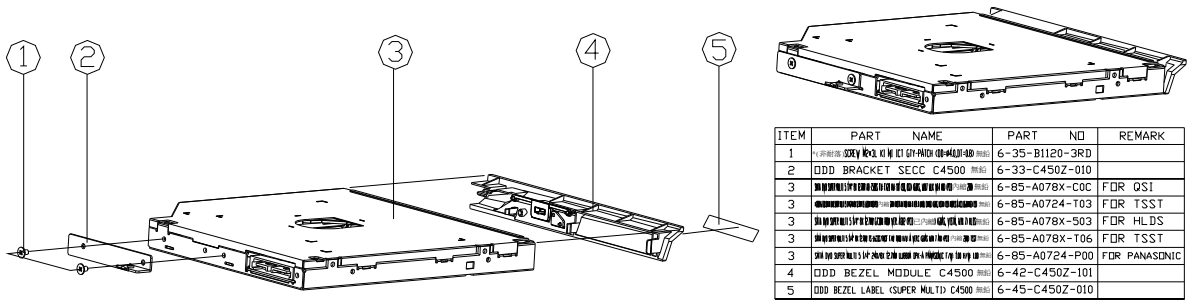
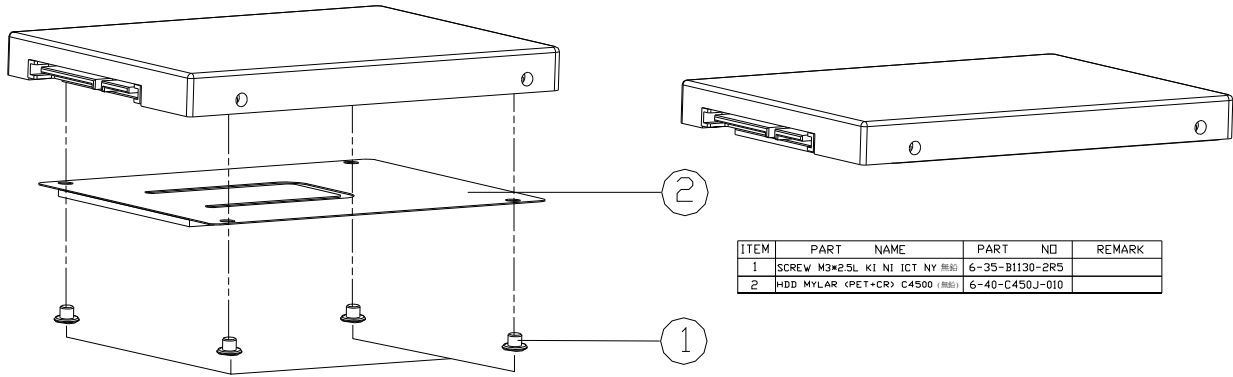


Figure A - 4
DVD-ROM Drive

HDD

Figure A - 5
HDD



ITEM	PART NAME	PART NO	REMARK
1	SCREW M3*2.5L KI NI ICT NY 無鉛	6-35-B1130-2R5	
2	HDD MYLAR (PET+CR) C4500 (RED)	6-40-C450J-010	

Appendix B:Schematic Diagrams

This appendix has circuit diagrams of the *C4500/C4501/C4505* notebook's PCB's. The following table indicates where to find the appropriate schematic diagram.

Diagram - Page	Diagram - Page	Diagram - Page
<i>SYSTEM BLOCK DIAGRAM - Page B - 2</i>	<i>HDMI, CRT - Page B - 14</i>	<i>System PWR, 2.5V - Page B - 26</i>
<i>Clock Generator - Page B - 3</i>	<i>SB700-1 - Page B - 15</i>	<i>PWRGD, RST - Page B - 27</i>
<i>CPU 1/4 - Page B - 4</i>	<i>SB700-2 - Page B - 16</i>	<i>VCore - Page B - 28</i>
<i>CPU 2/4 - Page B - 5</i>	<i>SB700-3 - Page B - 17</i>	<i>0.9V, 1.8V, 1.8VS, 1.5VS - Page B - 29</i>
<i>CPU 3/4 - Page B - 6</i>	<i>SB700-4 - Page B - 18</i>	<i>1.1VS, 1.2V, 1.2VS, 1.2V - Page B - 30</i>
<i>CPU 4/4 - Page B - 7</i>	<i>New Card, Mini PCIE - Page B - 19</i>	<i>VDD3, VDD5 - Page B - 31</i>
<i>DDR2 SO-DIMM 0 - Page B - 8</i>	<i>CCD, 3G, SATA ODD - Page B - 20</i>	<i>Charger, DC In - Page B - 32</i>
<i>DDR2 SO-DIMM 1 - Page B - 9</i>	<i>USB, Fan, TP, Multi Con - Page B - 21</i>	<i>Click Board - Page B - 33</i>
<i>RS780M-1 - Page B - 10</i>	<i>Card Reader / LAN JMB261 - Page B - 22</i>	<i>Audio Board - Page B - 34</i>
<i>RS780M-2 - Page B - 11</i>	<i>SATA HDD, LED, MDC, BT - Page B - 23</i>	<i>Power Switch Board - Page B - 35</i>
<i>RS780M-3 - Page B - 12</i>	<i>Audio Codec ALC272 - Page B - 24</i>	
<i>LVDS, Inverter - Page B - 13</i>	<i>KBC ITE IT8502E - Page B - 25</i>	

Table B - 1
**Schematic
Diagrams**



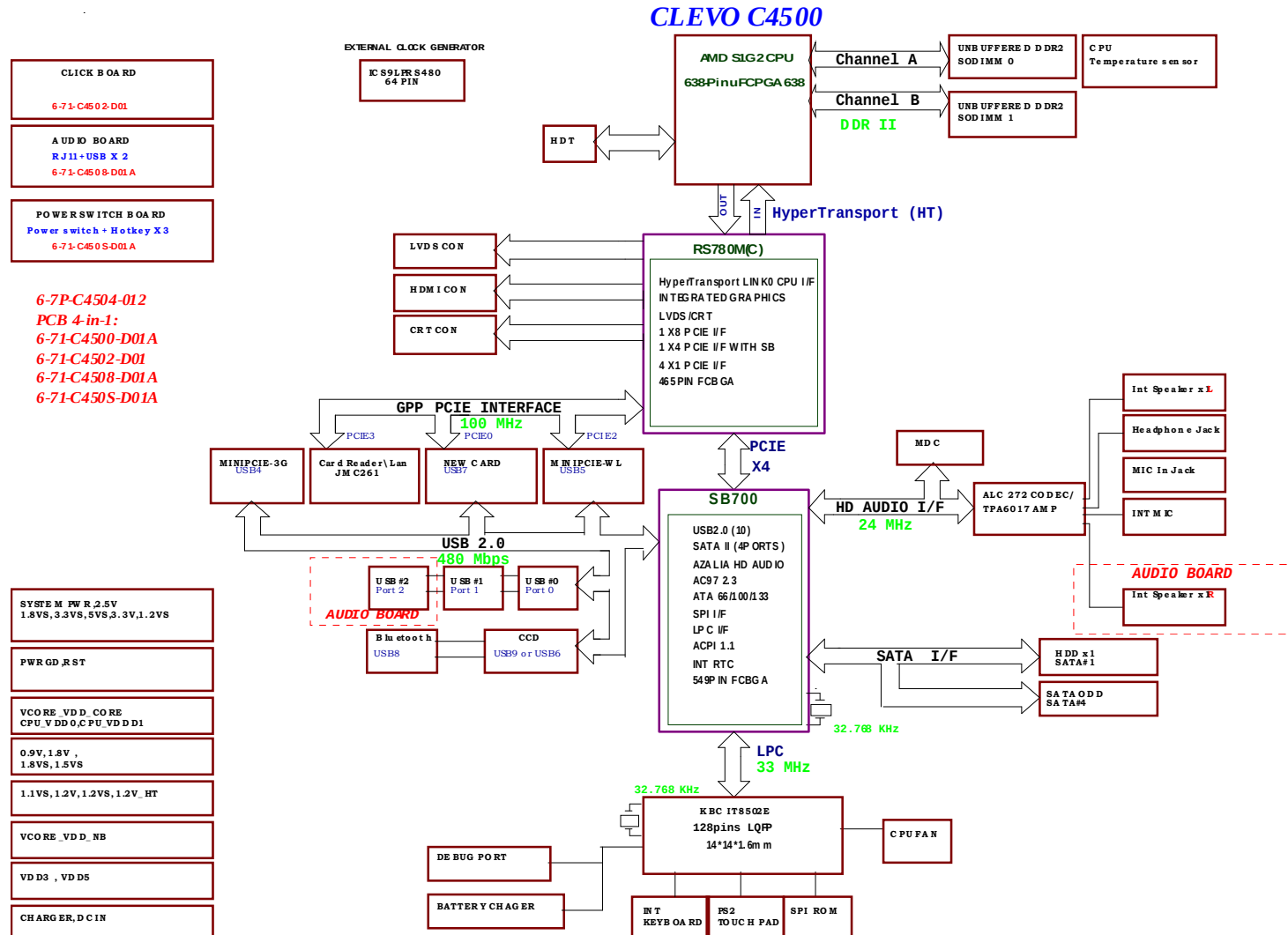
Version Note

The schematic diagrams in this chapter are based upon version 6-7P-C4504-012. If your mainboard (or other boards) are a later version, please check with the Service Center for updated diagrams (if required).

Schematic Diagrams

SYSTEM BLOCK DIAGRAM

Sheet 1 of 34
SYSTEM BLOCK
DIAGRAM



Clock Generator B - 3

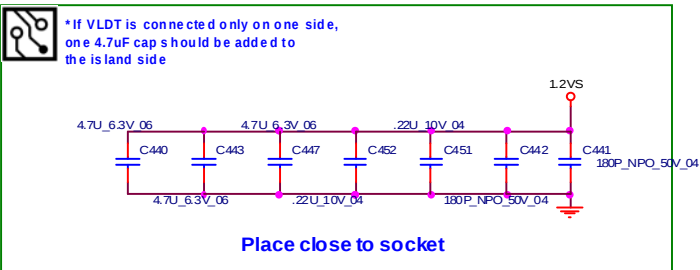
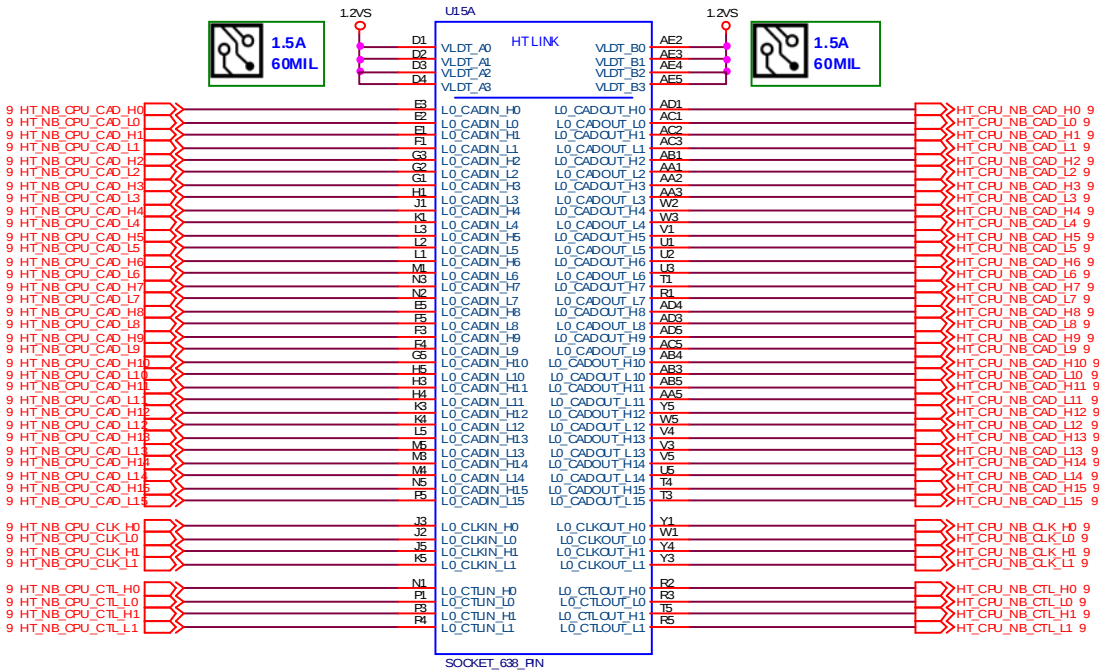


Clock chip has internal serial terminations for differential pairs, external resistors are reserved for debug purpose.

Schematic Diagrams

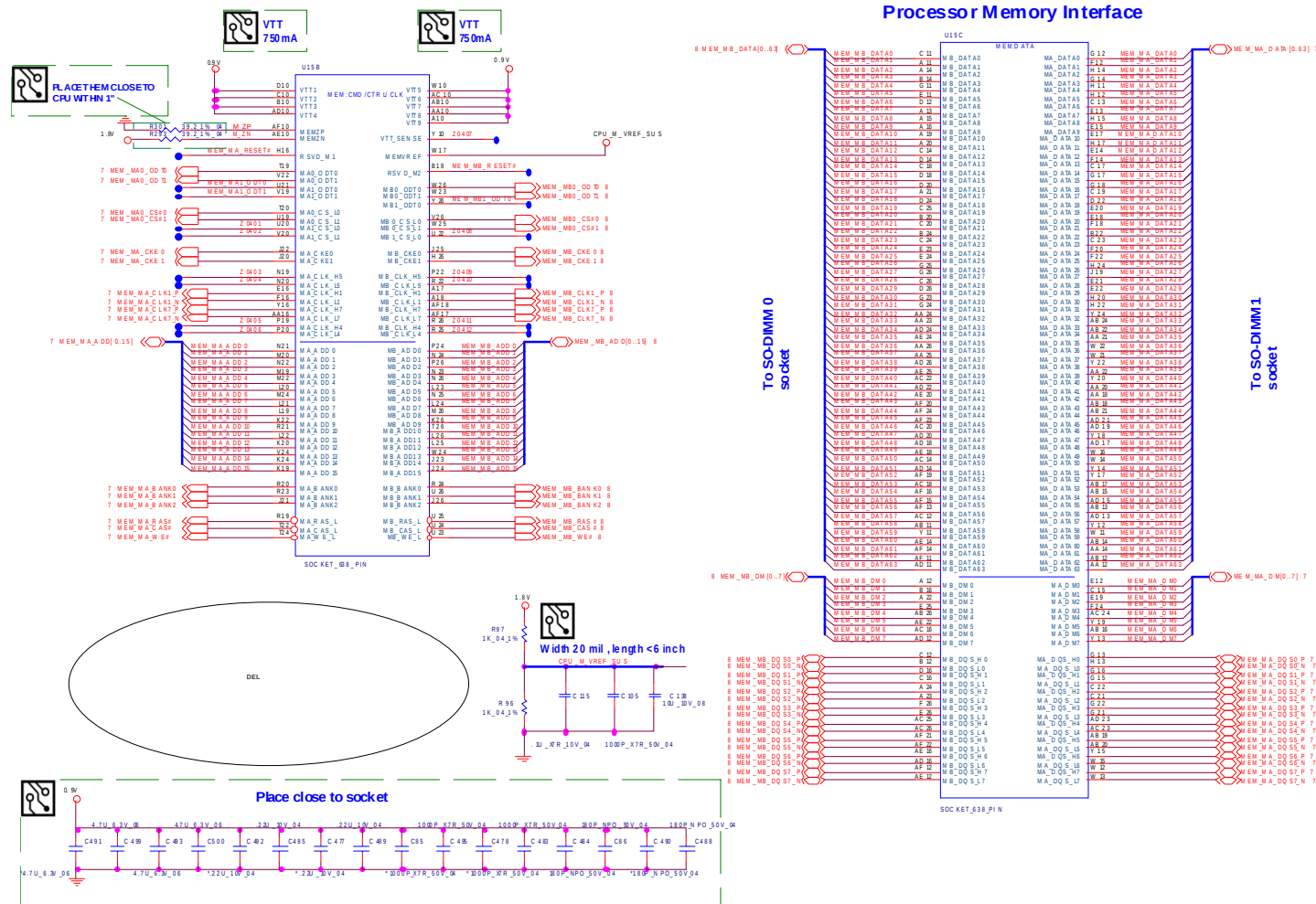
CPU 1/4

Sheet 3 of 34
CPU 1/4



Schematic Diagrams

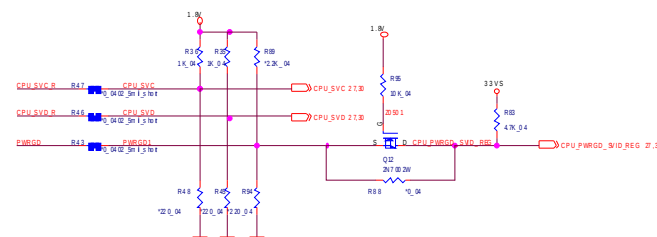
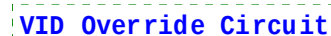
CPU 2/4

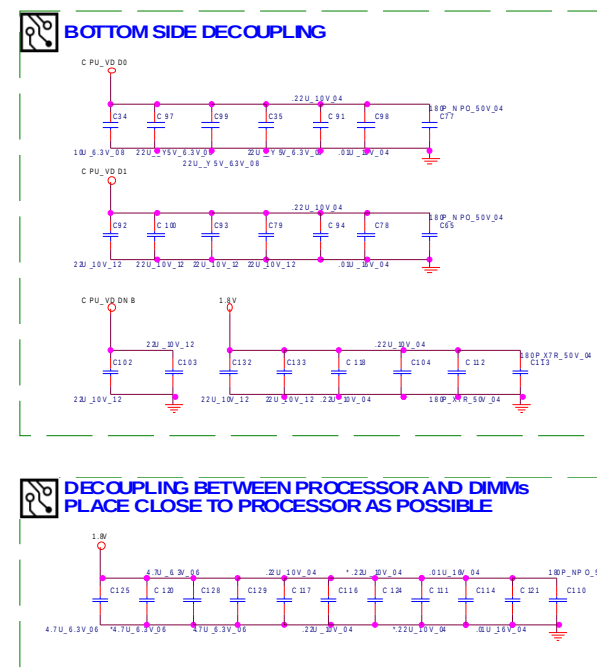
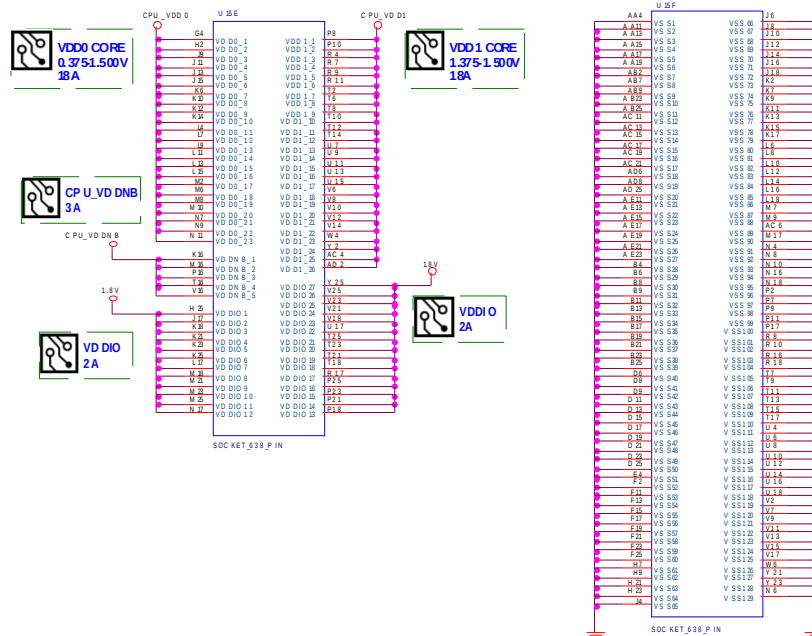


Sheet 4 of 34
CPU 2/4

B.Schematic Diagrams

Sheet 5 of 34
CPU 3/4





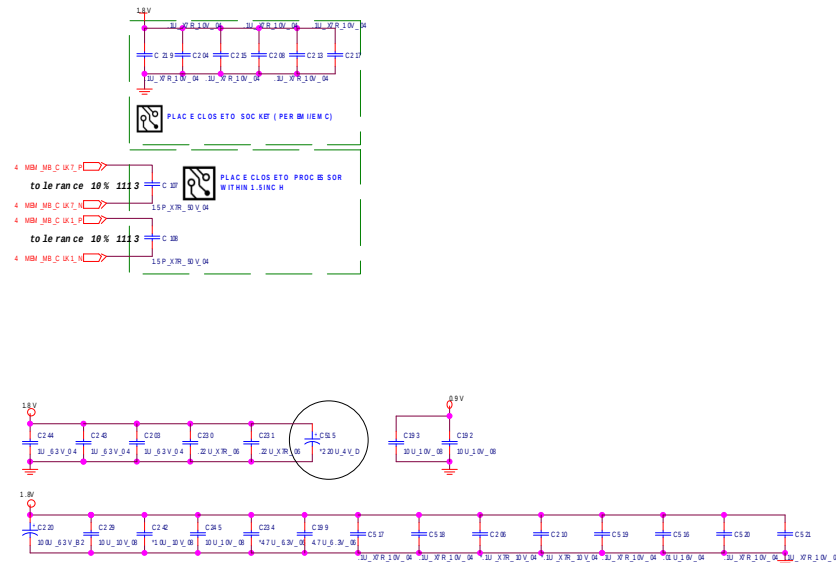
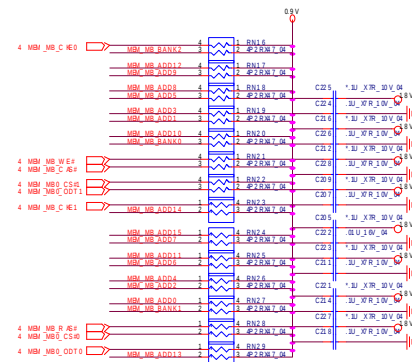
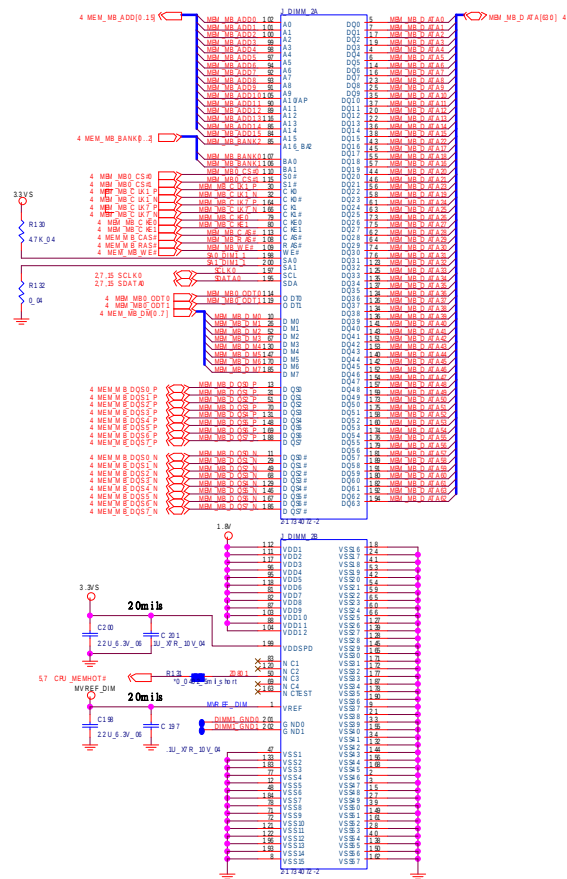
Sheet 6 of 34
CPU 4/4

B.Schematic Diagrams

DDR2 SO-DIMM 0

Sheet 7 of 34
DDR2 SO-DIMM 0

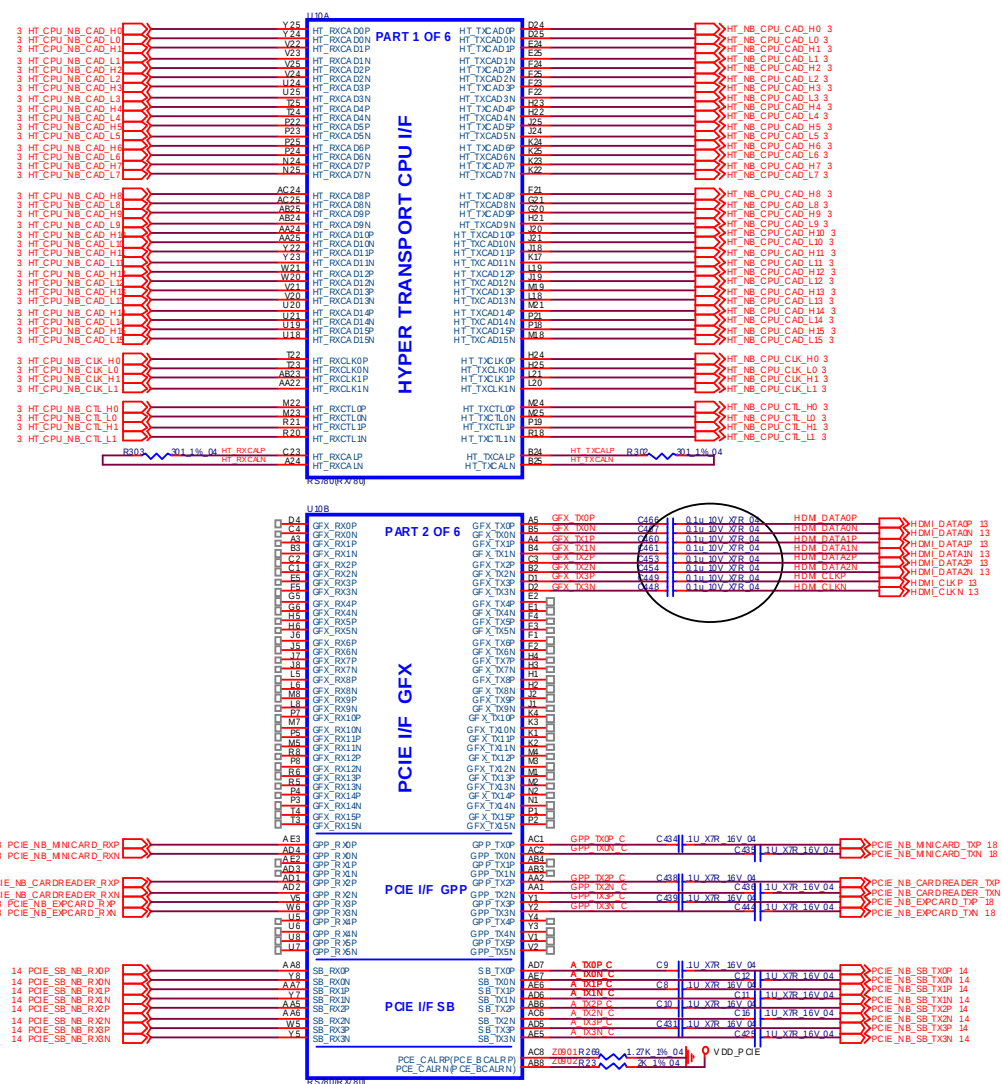


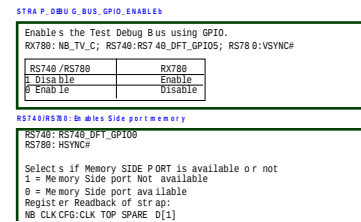


RS780M-1

B.Schematic Diagrams

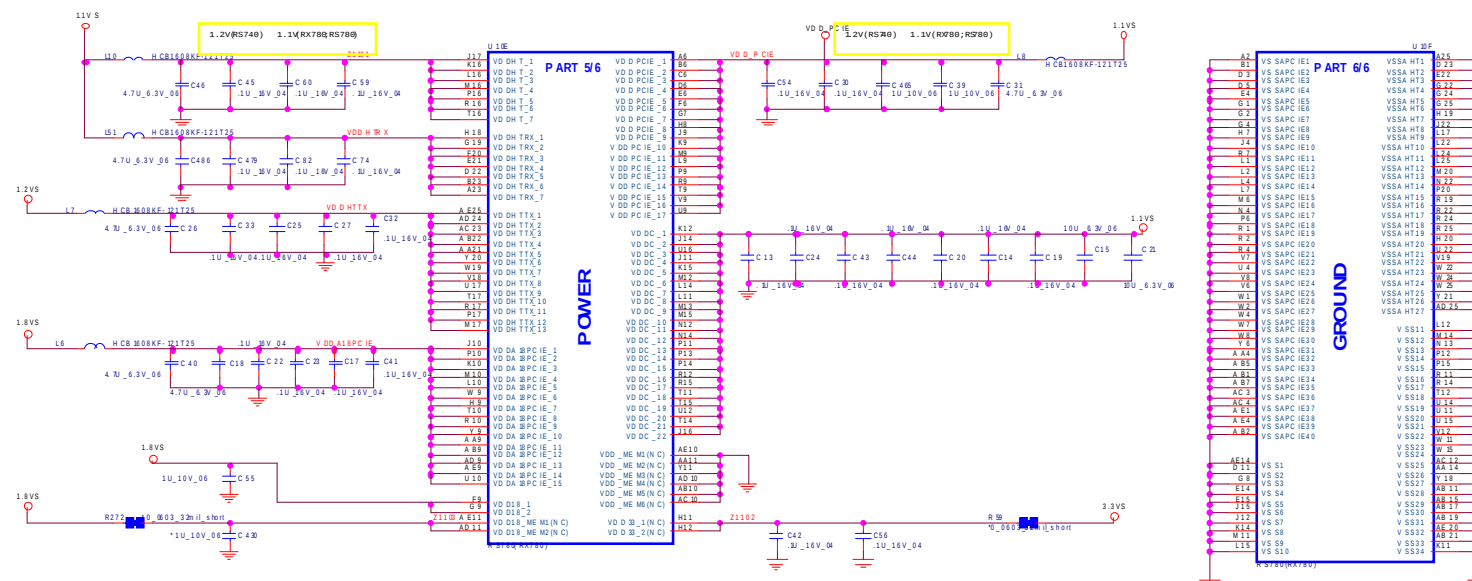
Sheet 9 of 34
RS780M-1





RS780M-3

Sheet 11 of 34
RS780M-3

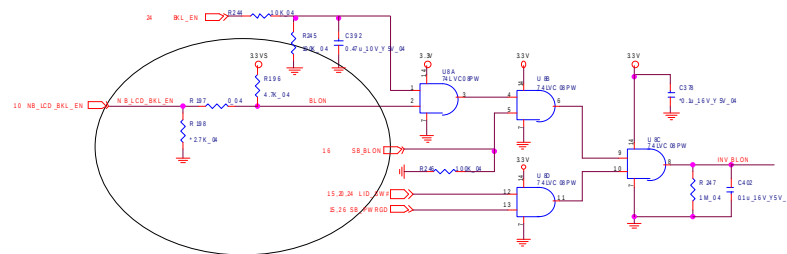


RS740/RX780/RS780 POWER DIFFERENCE TABLE

PIN NAME	RS740	RX760	RS780	PIN NAME	RS740	RX760	RS780
VDD HI	NC	+1.1V	+1.1V	IO PLLVDD	+1.1V	NC	+1.1V
VDD HTRX	NC	+1.1V	+1.1V	A VDD	+3.1V	NC	+3.1V
VDD HTTX	+1.2V	+1.2V	+1.2V	A VDD D1	+1.8V	NC	+1.8V
VDD AISPECE	NC	+1.8V	+1.8V	A VDD Q	+1.8V	NC	+1.8V
VDD G18	+4.8V	+1.8V	+1.8V	PLVDD	+1.1V	NC	+1.1V
VDD IEMEM	NC	N/C	+1.8V	VDD IEMEM	+1.8V	NC	+1.8V
VDD PCIE	+1.2V	+1.1V	+1.1V	VDD AISPEFLL	+1.2V	+1.1V	+1.1V
VDD C	+1.2V	+1.1V	+1.1V	VDD AISHTFLL	+1.8V	+1.1V	+1.1V
VDD_MEM	+1.1V/1.5V	NC	+1.8V/1.5V	VDD LPWM	+1.8V	NC	+1.1V
VDD G33	+3.3V	N/C	+1.1V	VDD L183	+1.8V	NC	+1.8V
IO PLLVDD18	+4.8V	N/C	+1.8V	VDD L183	+1.8V	NC	NC

LVDS, Inverter B - 13

INVERTER CONNECTOR

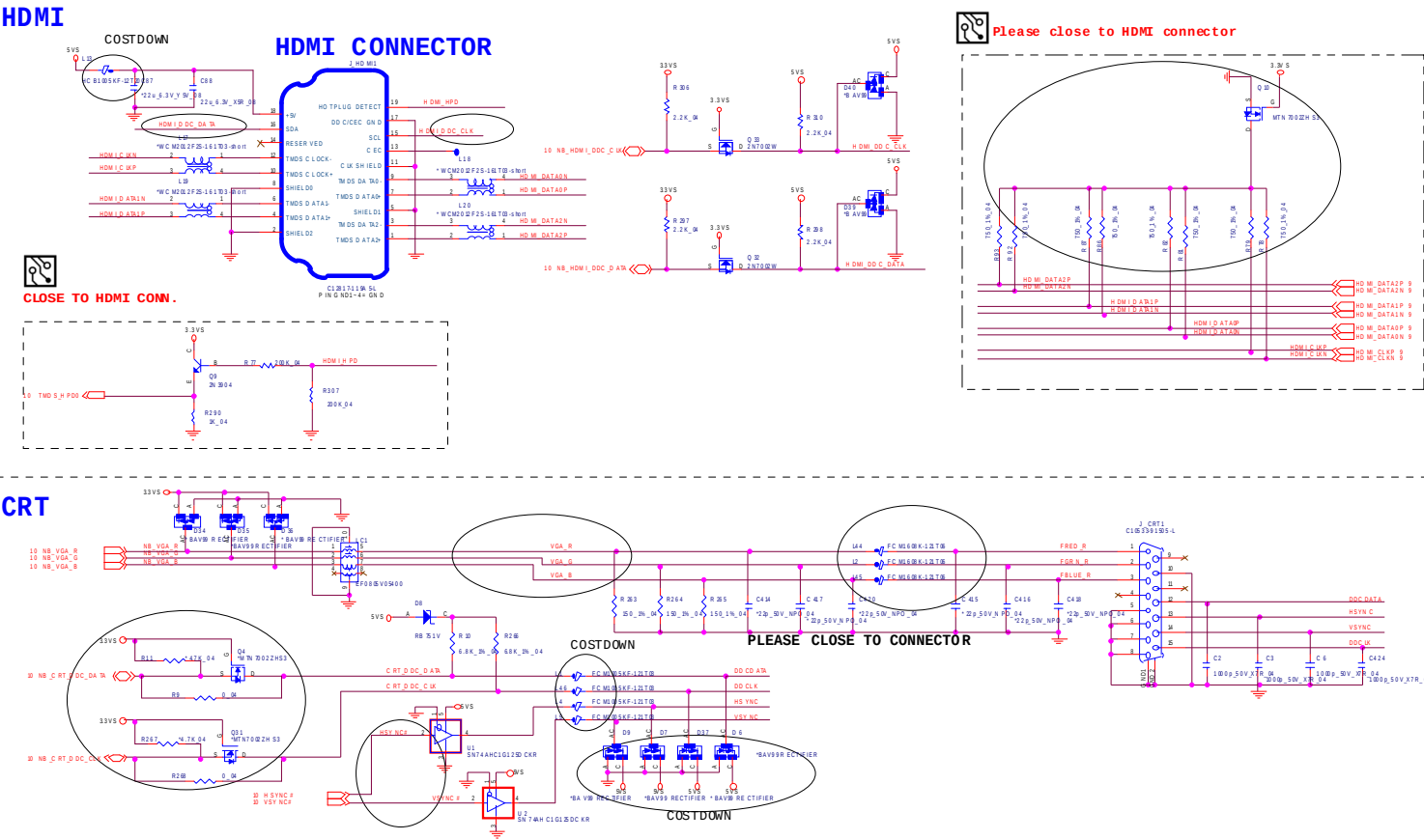


Sheet 12 of 34
LVDS, inverter

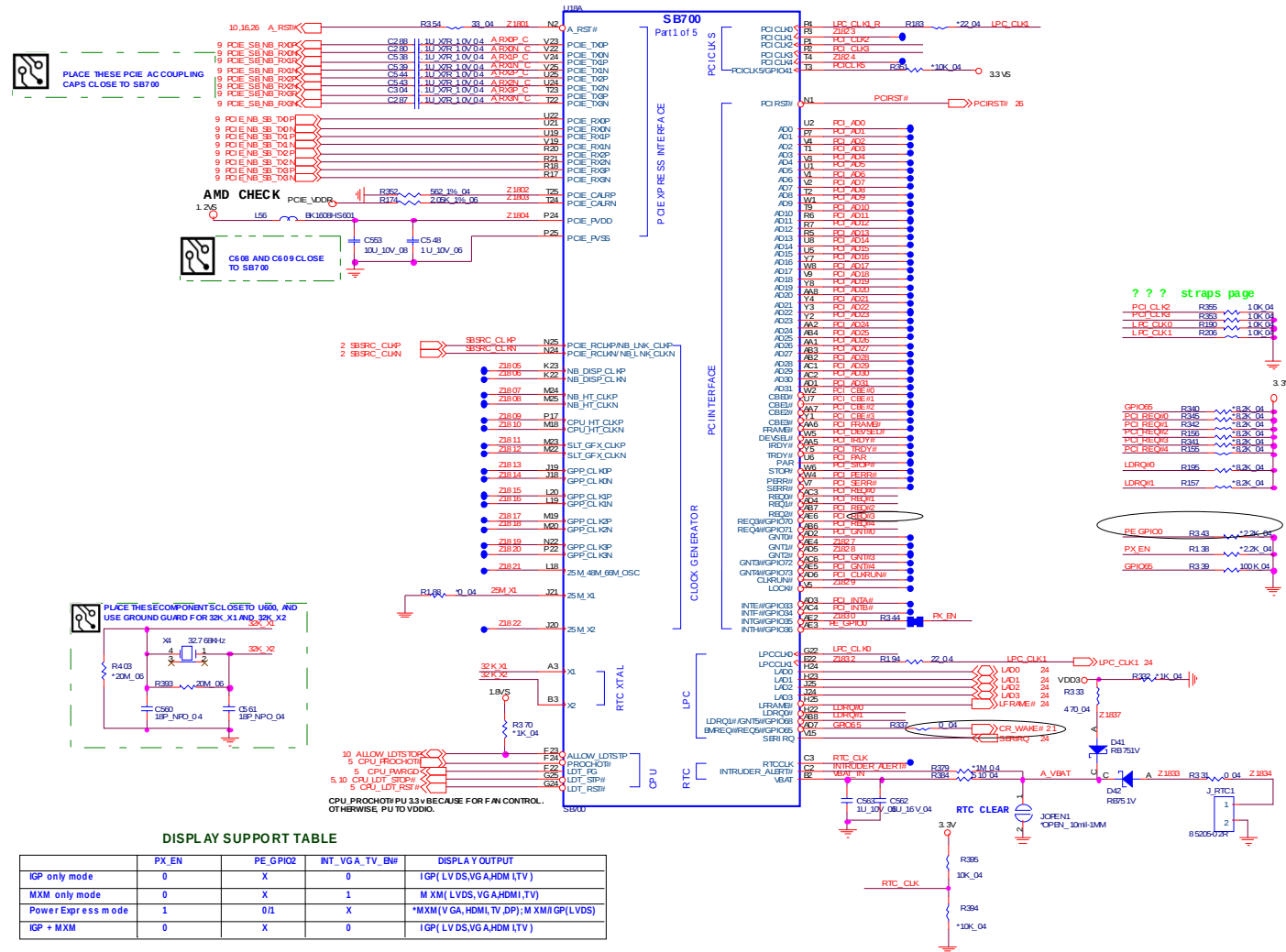
Schematic Diagrams

HDMI, CRT

Sheet 13 of 34
HDMI, CRT

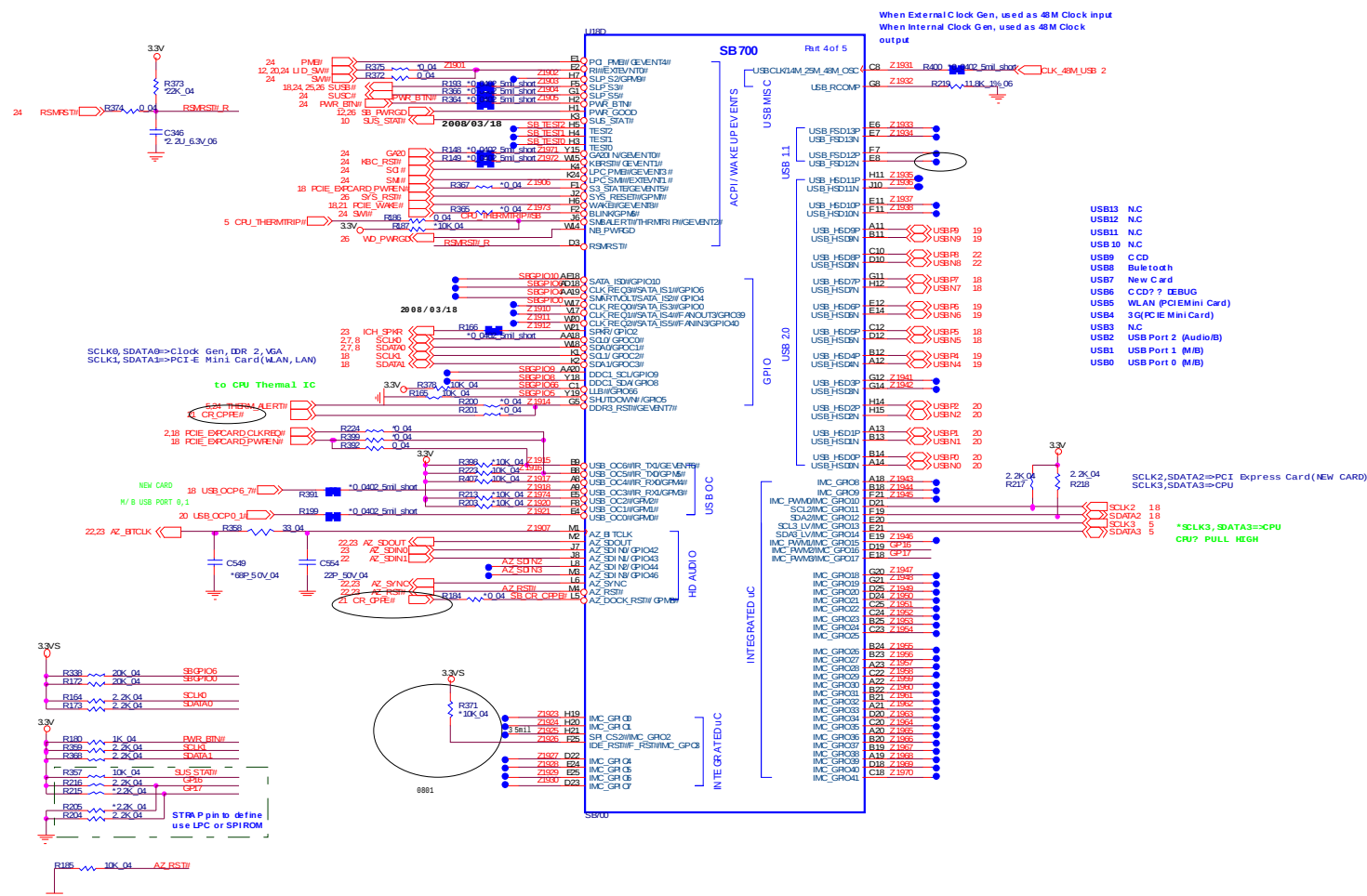


SB700-1

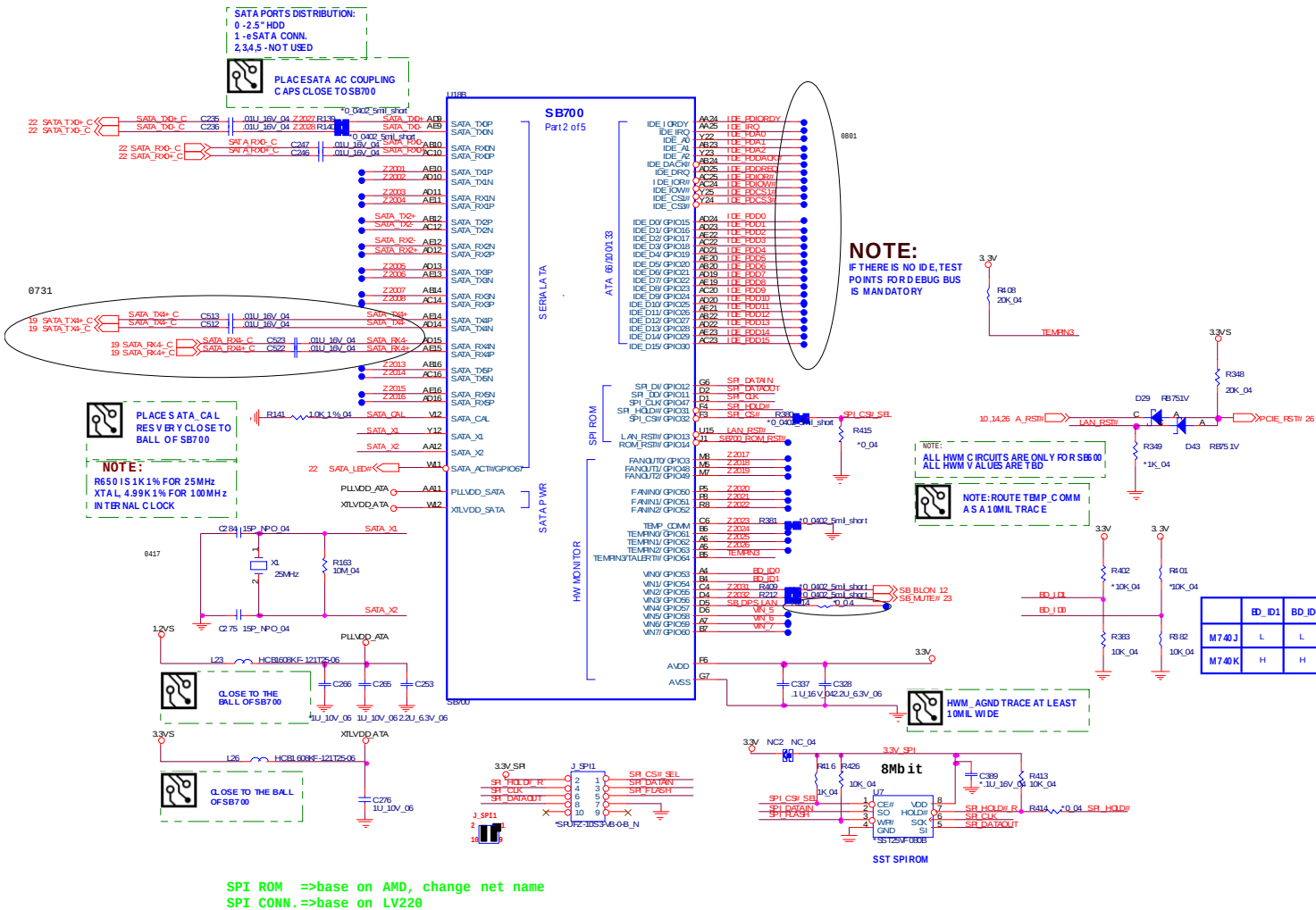
Sheet 14 of 34
SB700-1

SB700-2

Sheet 15 of 34
SB700-2



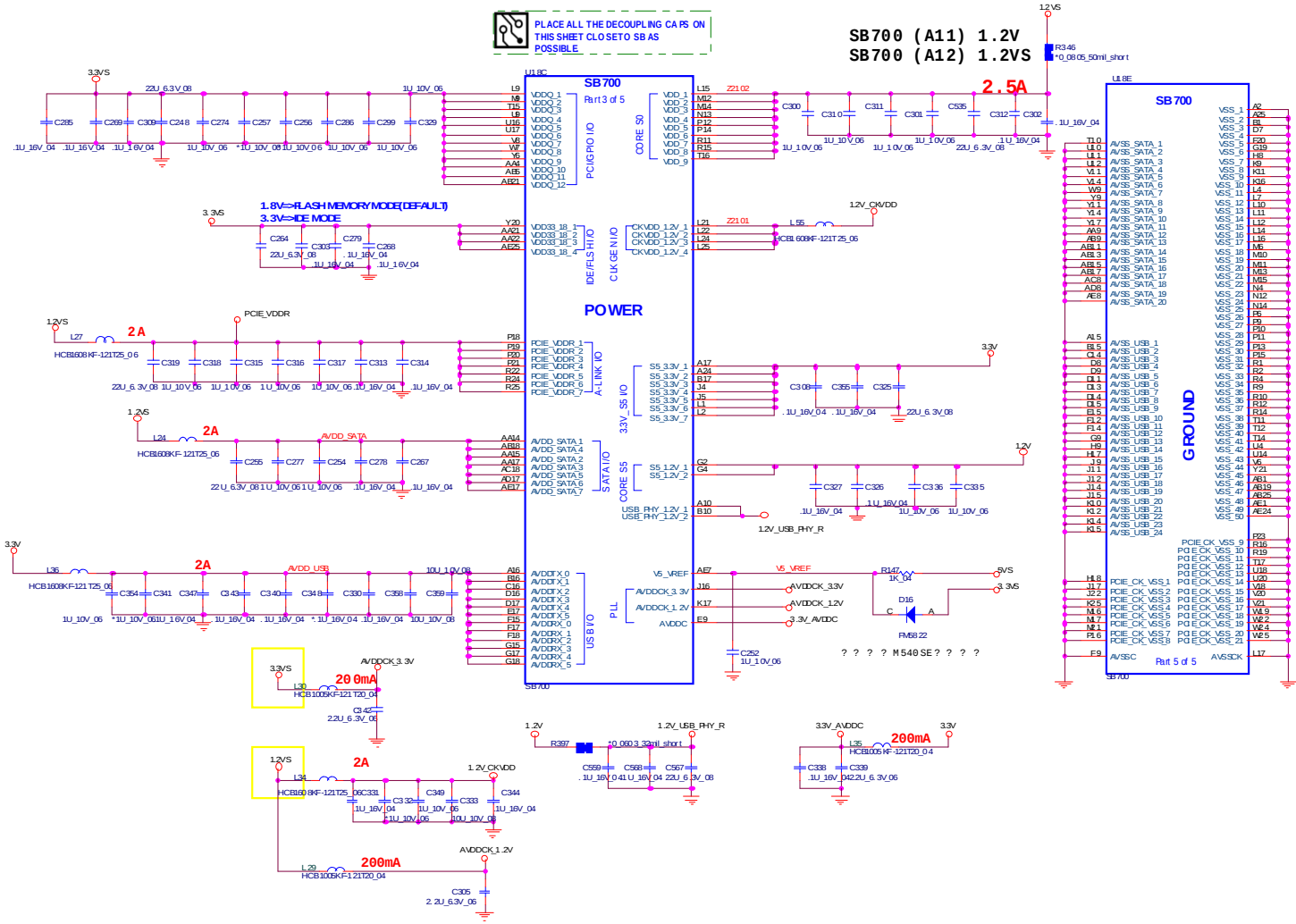
SB700-3

Sheet 16 of 34
SB700-3

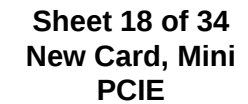
Schematic Diagrams

SB700-4

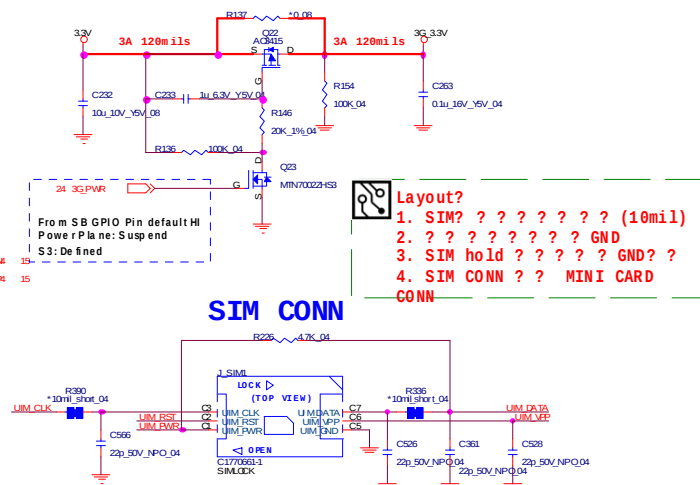
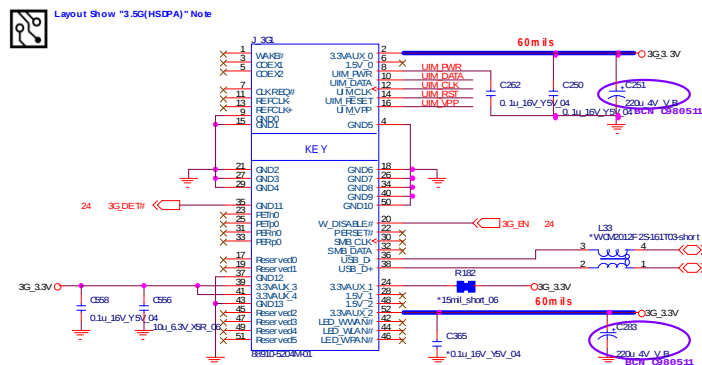
Sheet 17 of 34
SB700-4



NEW CARD(Port 8)

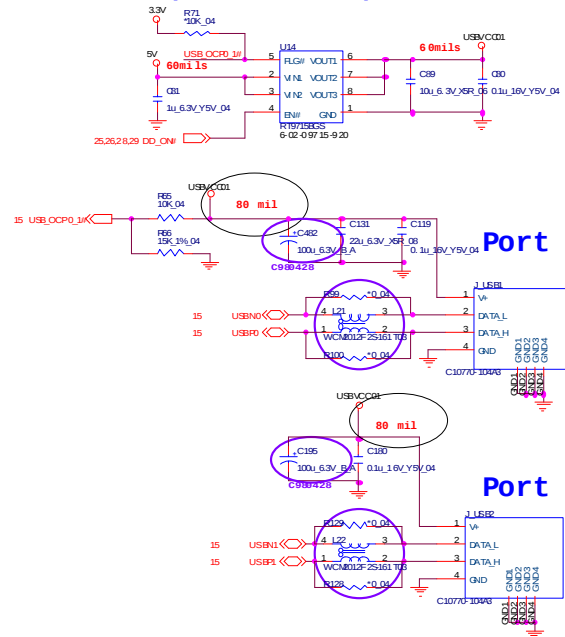


Sheet 19 of 34
CCD, 3G,
SATA ODD

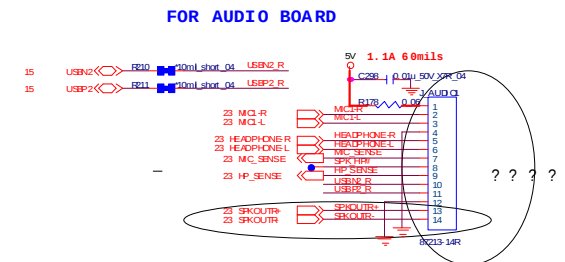
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USB, Fan, TP, Multi Con

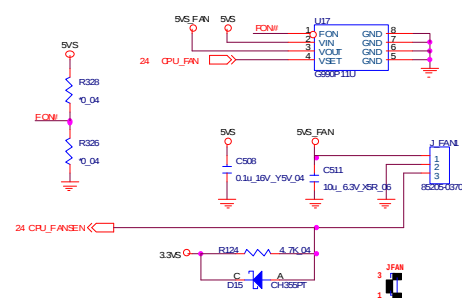
USB PORT*2(Port 0,Port1)



Audio/B CONN.(Port 2)

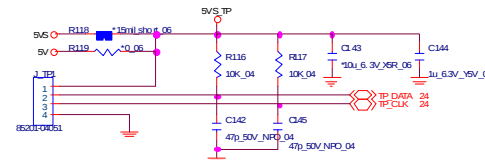


FAN CONTROL



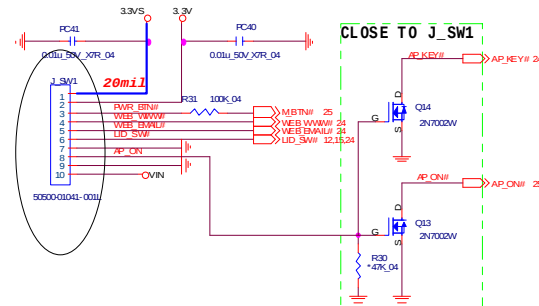
CLICK CONN

FOR CLICK BOARD

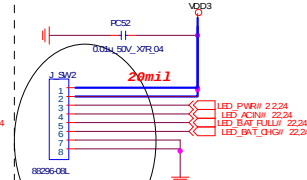


POWER SWITCH CONN.

FOR POWER SWITCH BOARD

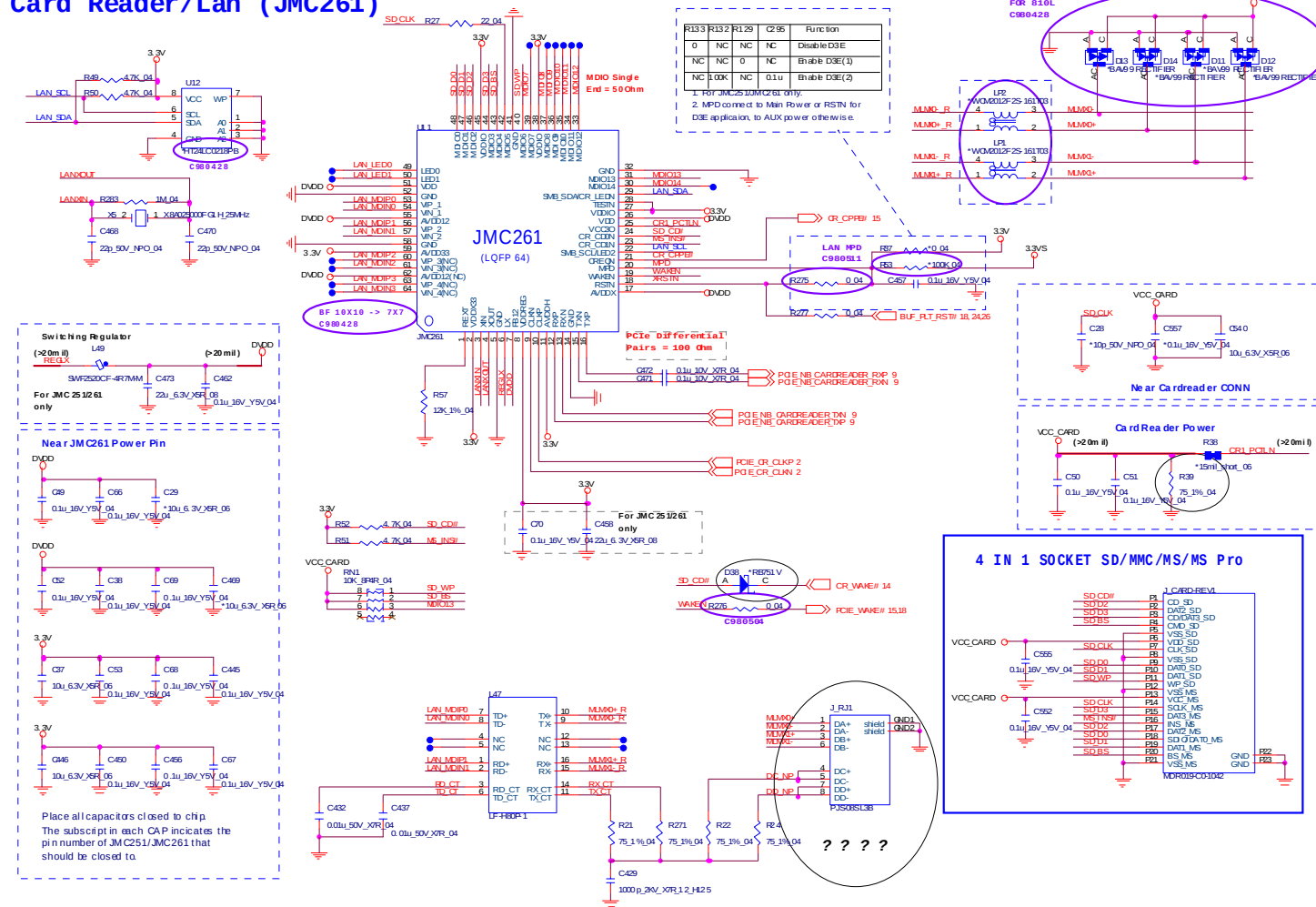


SECOND ID CONN.



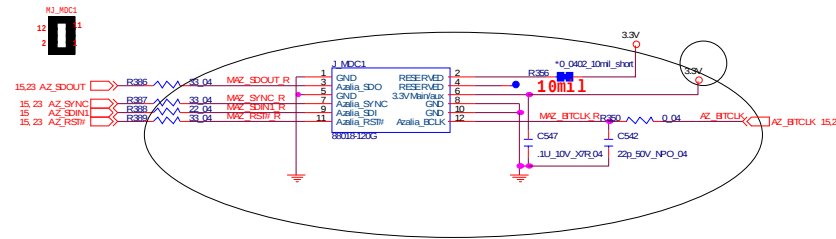
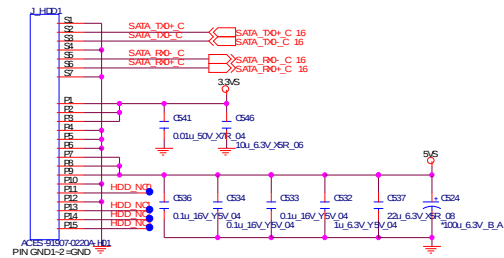
Sheet 20 of 34
USB, CCD, TP,
Multi Con

Card Reader/Lan (JMC261)



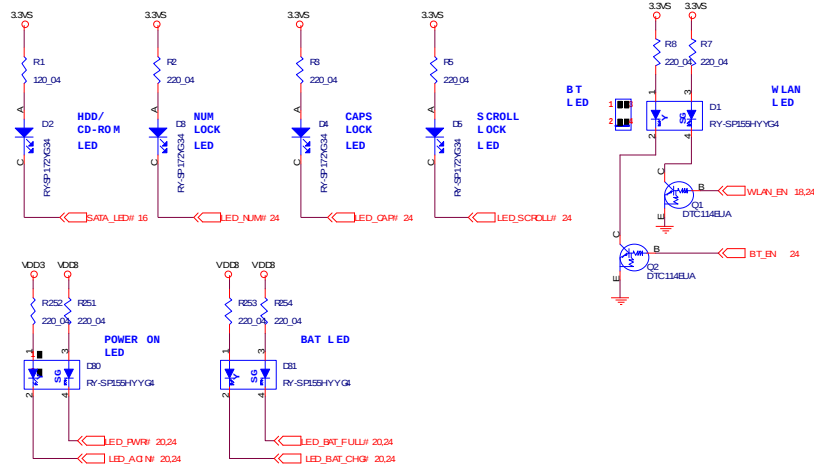
SATA HDD, LED, MDC, BT

SATA HDD

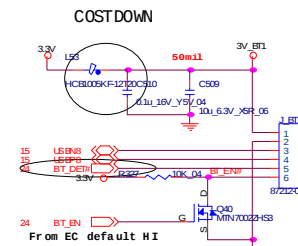


Sheet 22 of 34
SATA HDD, LED,
MDC, BT

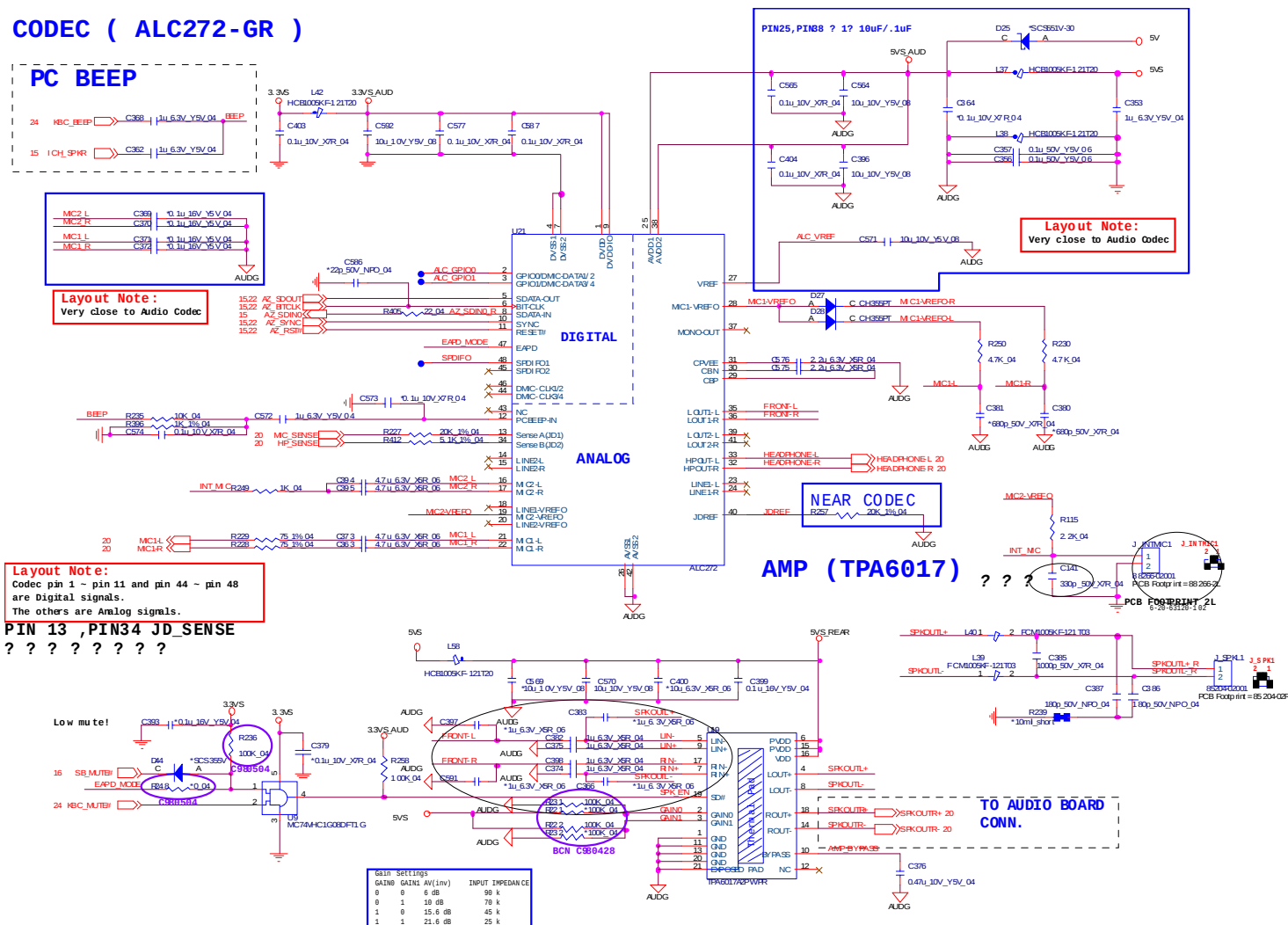
LED

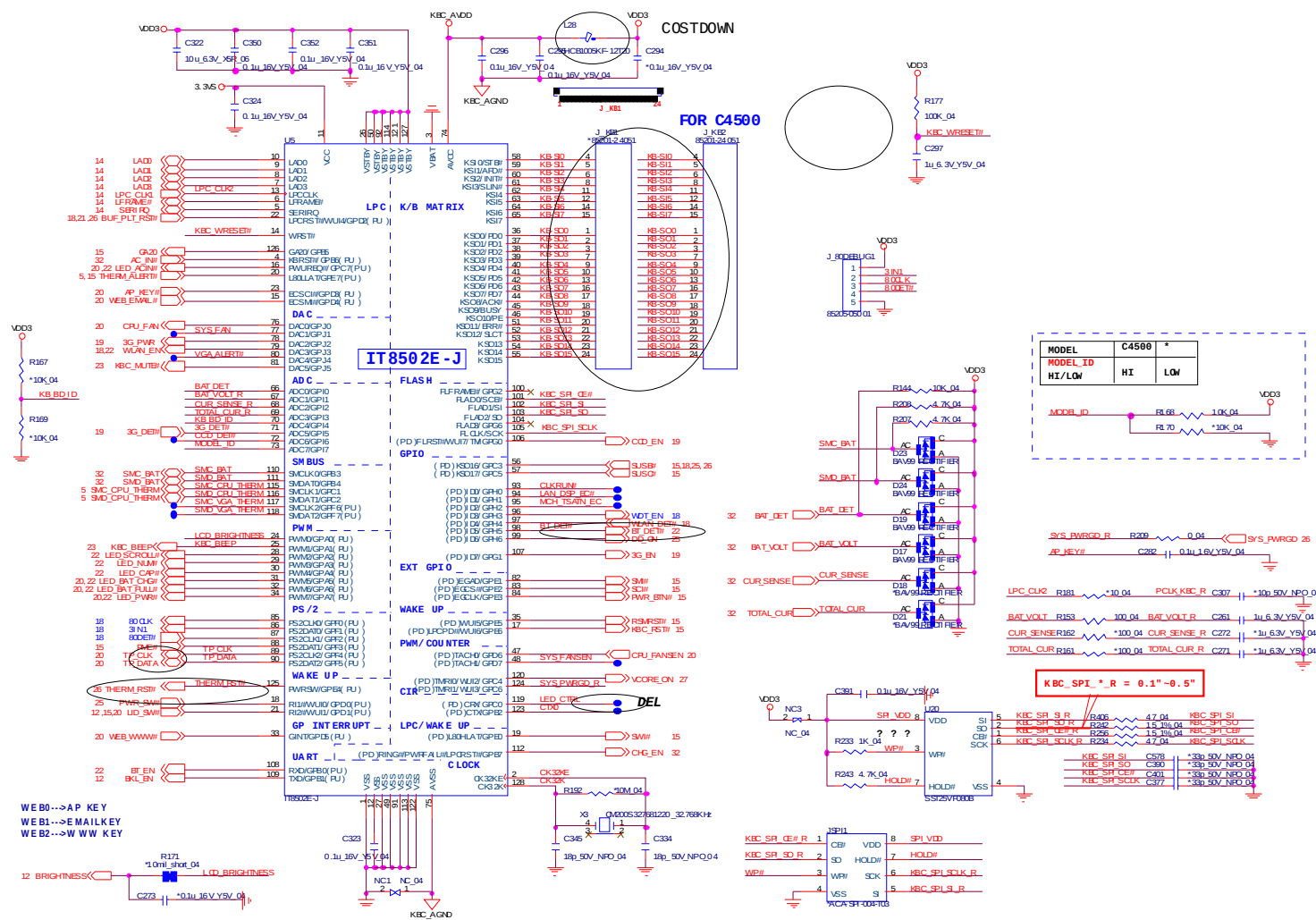


Bluetooth(Port8) Layout Show "Bluetooth For M740K/KU" Note

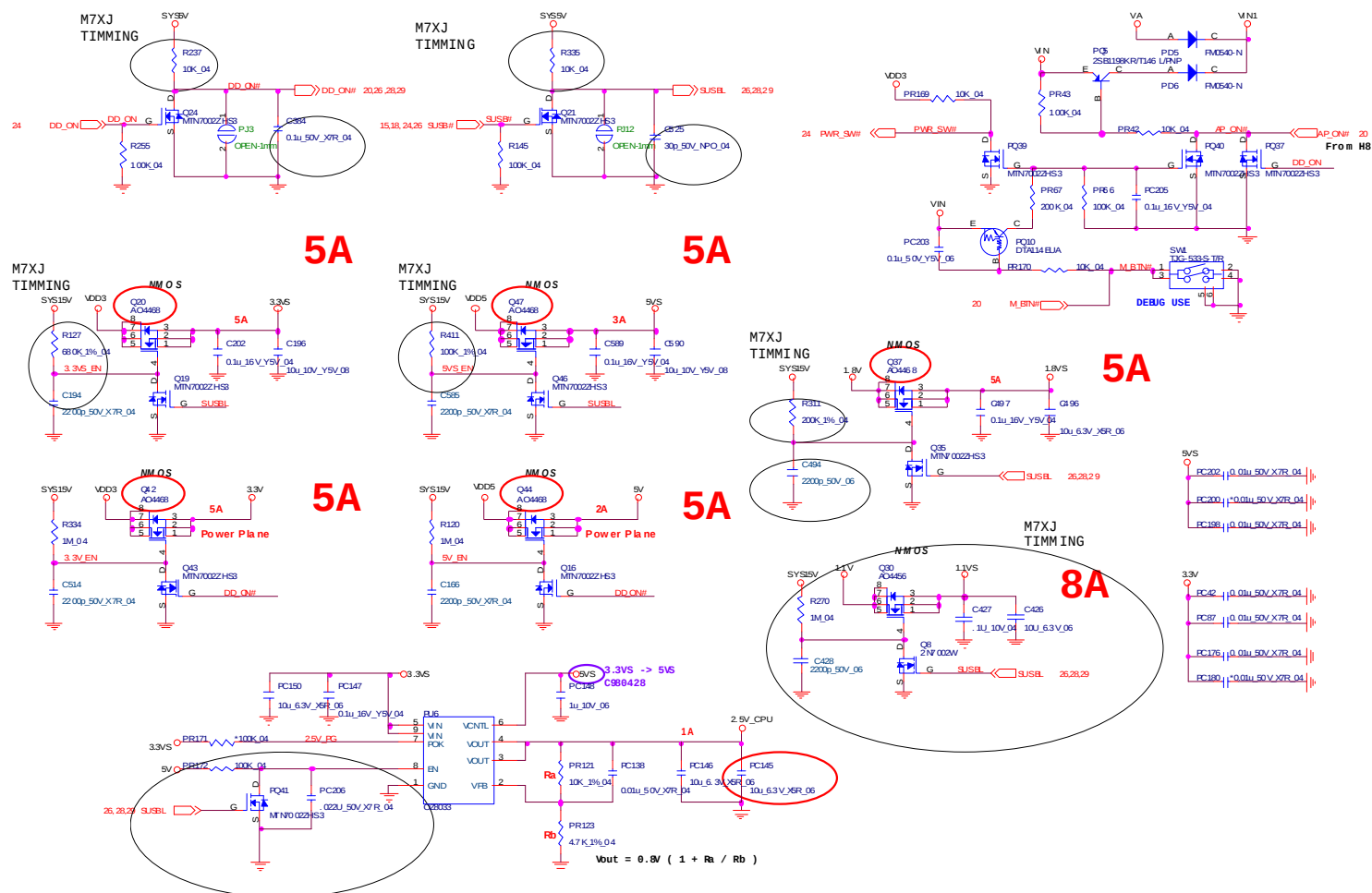


Sheet 23 of 34
Audio Codec
ALC272





Sheet 24 of 34
KBC ITE IT8502E



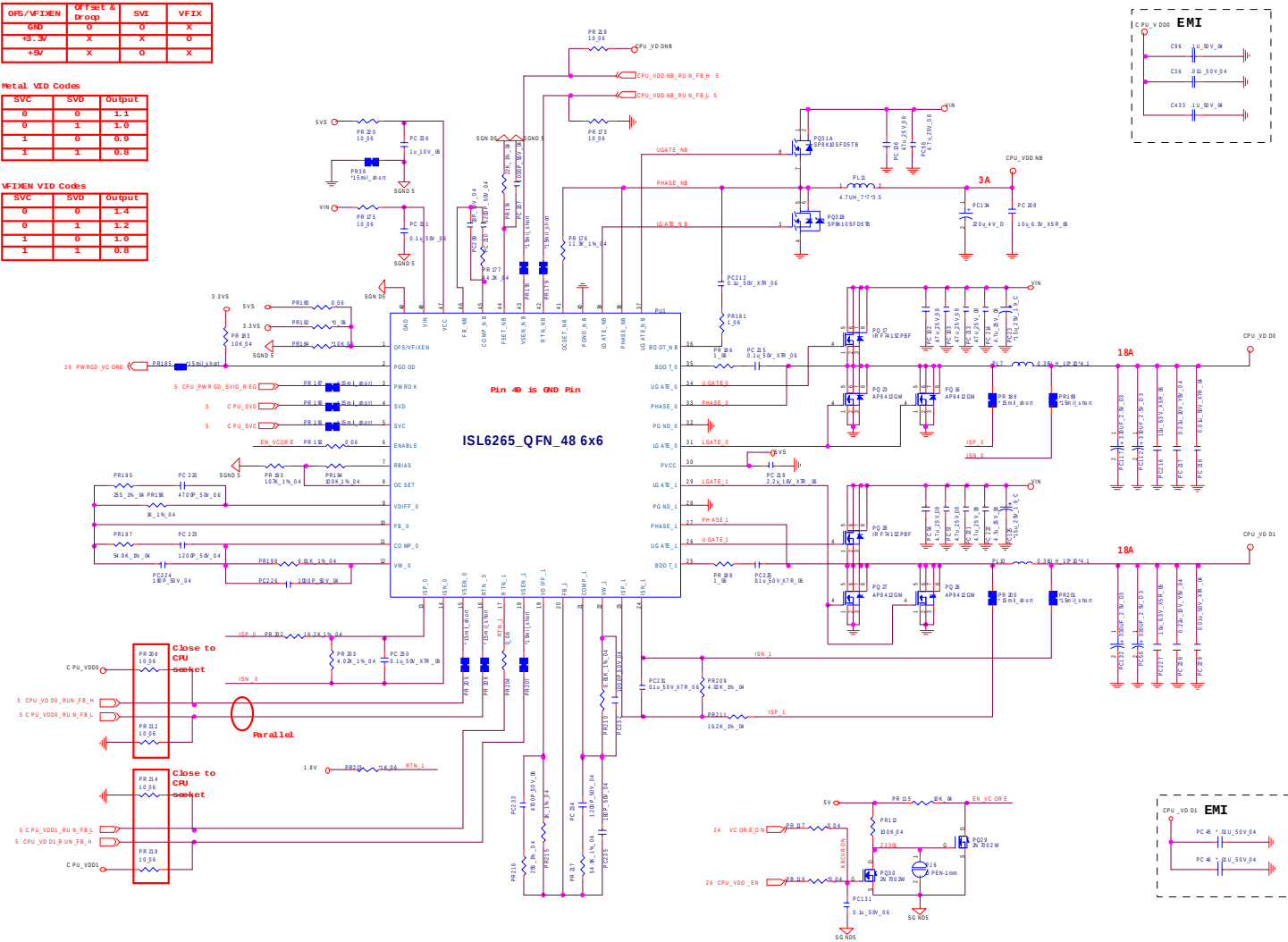
PWRGD, RST B - 27



Schematic Diagrams

VCore

Sheet 27 of 34
VCore



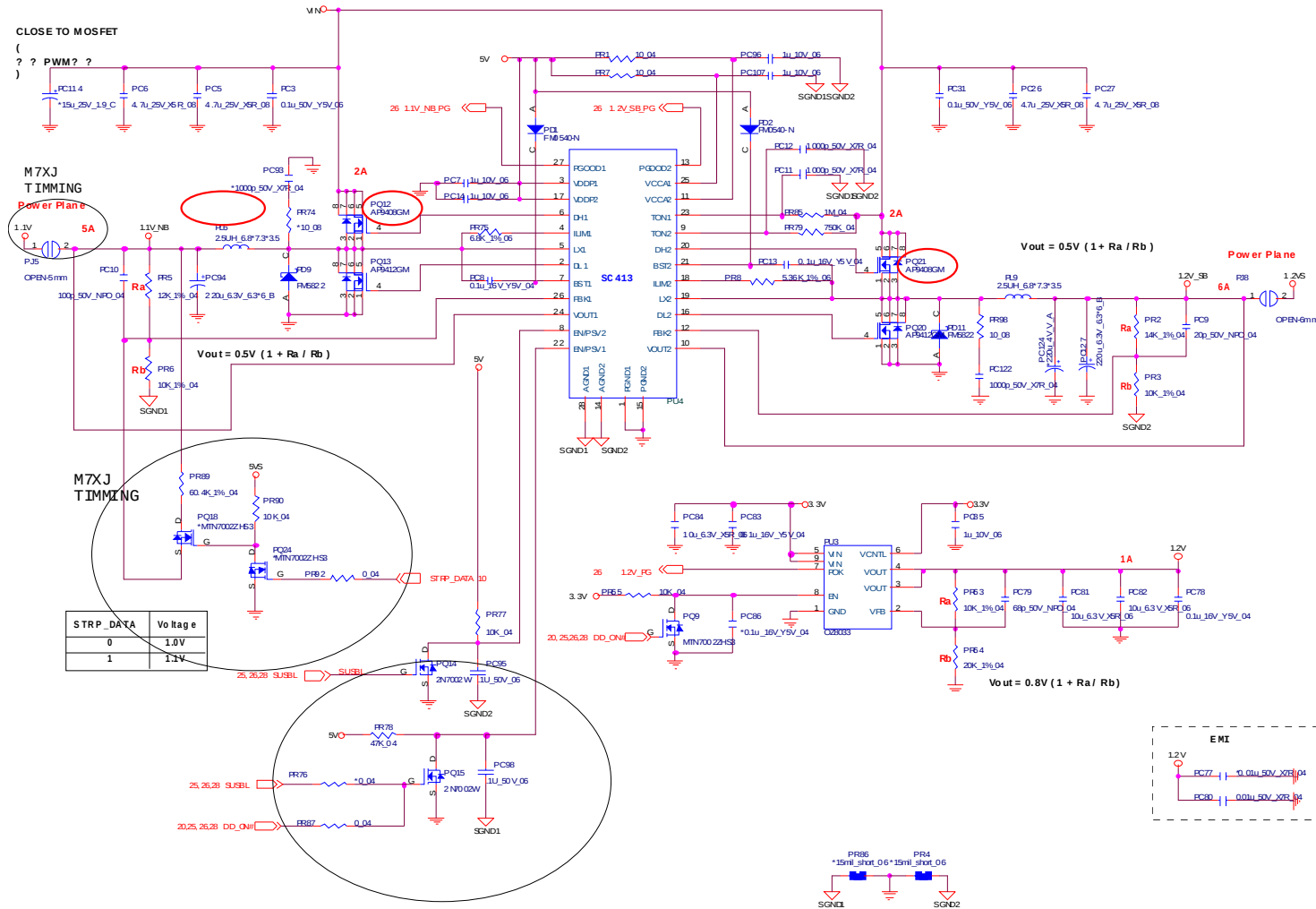
Sheet 28 of 34
0.9V, 1.8V, 1.8VS,
1.5VS



Schematic Diagrams

1.1VS, 1.2V, 1.2VS, 1.2V

Sheet 29 of 34
1.1VS, 1.2V, 1.2VS,
1.2V



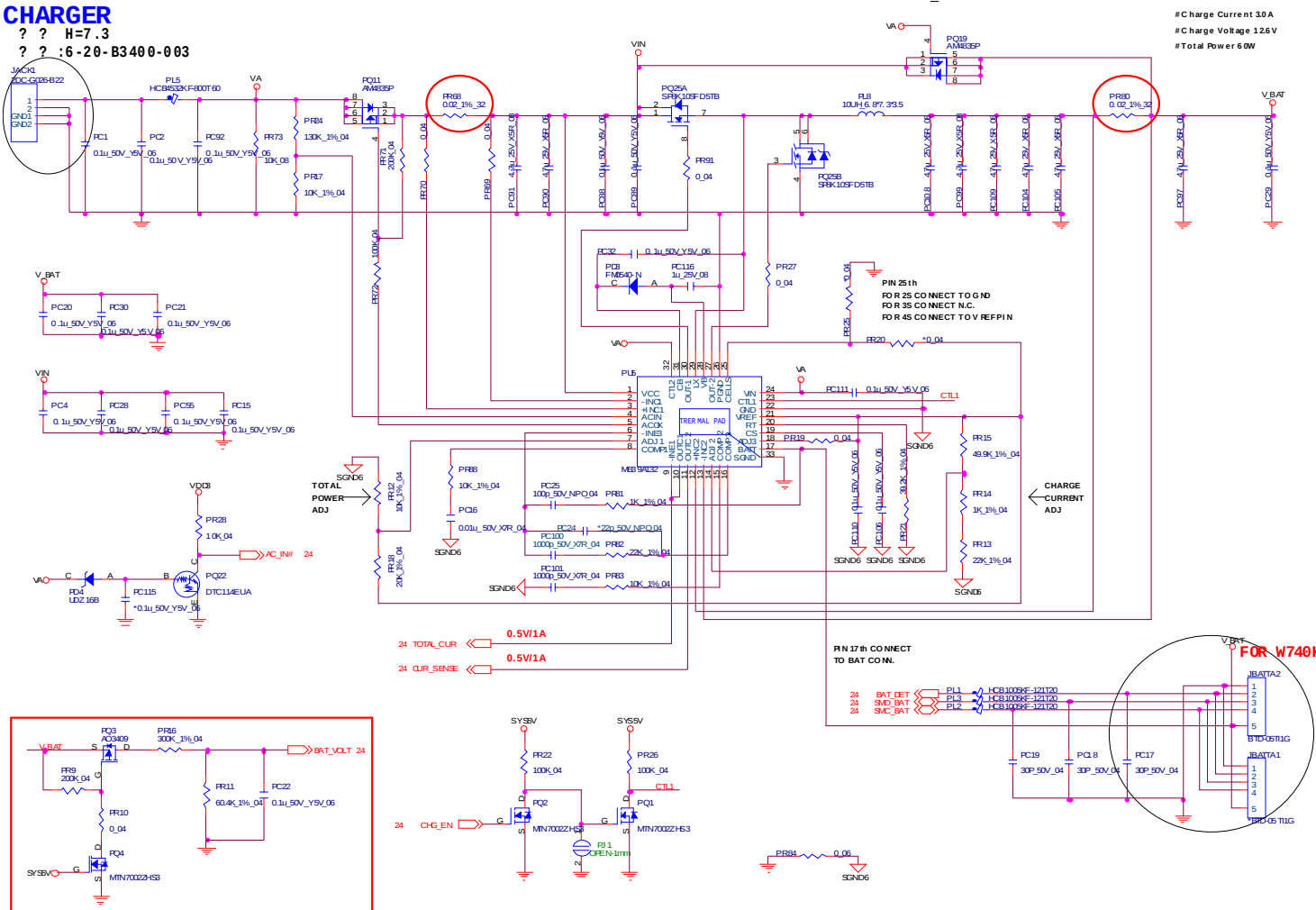
Sheet 30 of 34
VDD3, VDD5



Schematic Diagrams

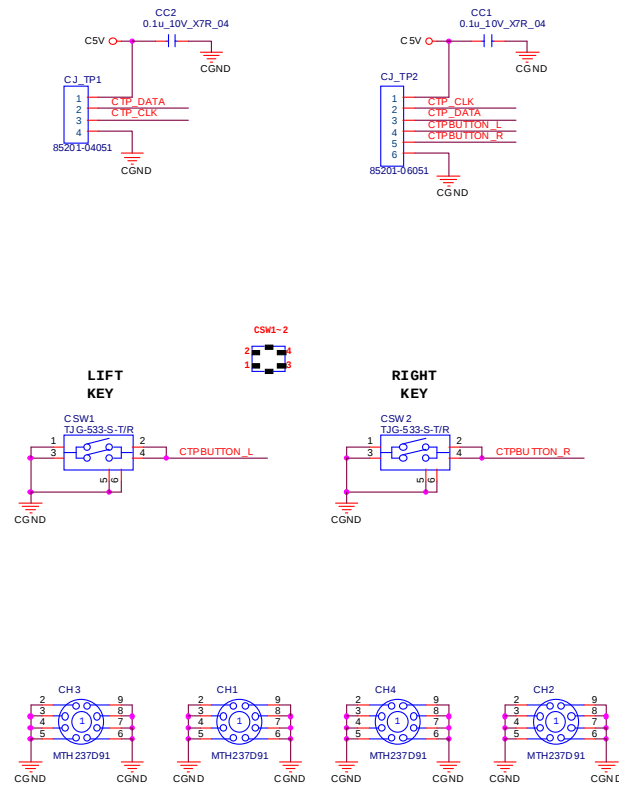
Charger, DC In

Sheet 31 of 34
Charger, DC In



Click Board

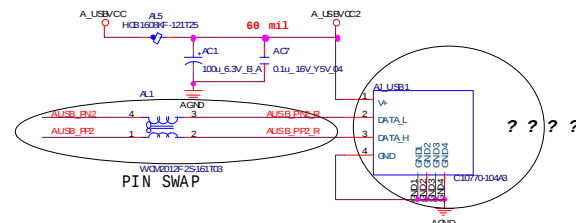
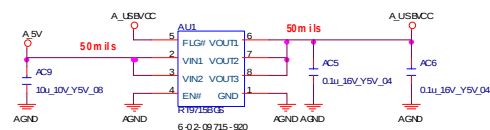
CLICK BOARD



Sheet 32 of 34
Click Board

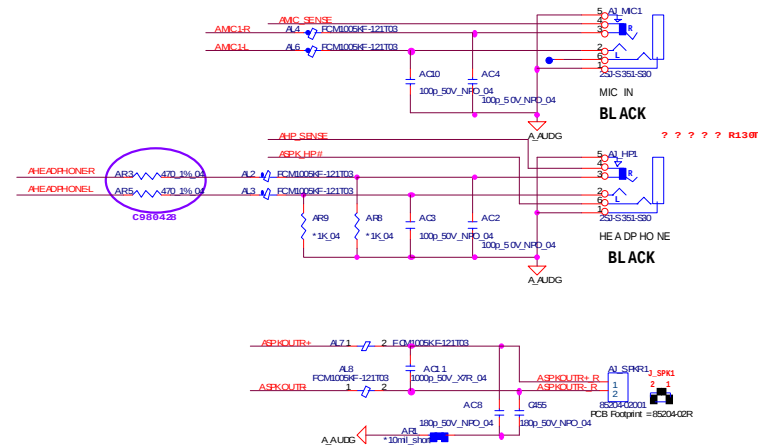
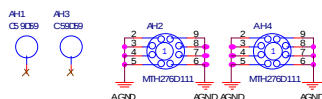
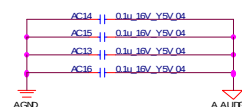
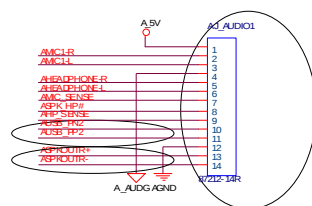
Audio Board

USB PORT



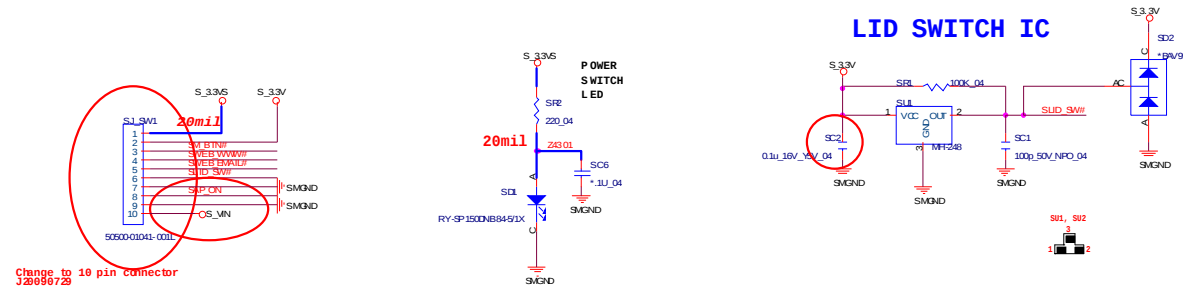
TO M/B

AUDIO JACK



Power Switch Board

POWER SW & LED & HOT KEY



Sheet 34 of 34
Power Switch
Board

HOT KEY

